PCB SUBMITTAL

ESTABROOK ELEMENTARY SCHOOL
117 GROVE STREET
LEXINGTON, MA

SUBMITTED BY:

American Environmental, Inc.

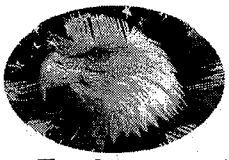
18 Canal Street, Holyoke, MA 01040

December, 2013

SUBMITTAL 1.10.D

Project References

PCB Submittal
Estabrook Elementary School, Lexington, MA



American Environmental, Inc.
18 Canal Street
Holyoke, MA 01040

PCB Remediation-Recent Project References

Martin Luther King School - Asbestos Abatement & PCB Remediation
Owner: City of Cambridge
General Contractor: W. T. Rich Co.
G.C. Rep. and Phone #: Jonathan Rich, (617) 590-4702
Contract Price: $4,900,000
Consultant: Fuss & O'Neill
Consultant Contact & Phone #: Robert May (617) 282-4675
Project Dates: 6/2013 – on-going
Site Supervisors: Julio Bermejo and Claudio Bermejo
Scope of Work: Floor tile and mastic, pipe insulation, window caulking, boiler insulation, PCB-containing caulks, roofing and black ceiling paint.

Former Roosevelt School - Asbestos Abatement & PCB Remediation
Owner: City of Bridgeport, CT
General Contractor: Fusco Corporation
G.C. Rep. and Phone #: Matt Johnson, (203) 777-7451
Contract Price: $2,525,000.00
Consultant: Hygenix, Inc.
Consultant Contact & Phone #: Jim Twitchell (203) 324-2222
Project Dates: 7/2012 – 11/2012
Site Supervisors: Julio Bermejo, Diego Sarmiento, Claudio Bermejo, and Dale Hardy
Scope of Work: Sprayed-on fireproofing, Fireproofing-contaminated block walls, Floor tile and mastic, glue daubs, PCB-containing caulks, fluorescent light bulbs and ballasts

Newton North High School - Asbestos Abatement & Miscellaneous Waste Streams
Owner: City of Newton, MA
General Contractor: Dimeo Construction
G.C. Rep. and Phone #: Matt Frongillo, (781) 953-3648
Contract Price: $4,600,000.00
Consultant: ATC Associates, Inc.
Consultant Contact & Phone #: Doug Rader (781) 937-3320
Project Dates: 7/2010 – 4/2011
Site Supervisors: Julio Bermejo, Diego Sarmiento, Claudio Bermejo, and Marcus Miller
Scope of Work: Sprayed-on fireproofing, Fireproofing-contaminated block walls, Floor tile and mastic, glue daubs, fire doors, PCB-containing caulks, fluorescent light bulbs and ballasts

SUBMITTAL 1.10.E

Site Specific Health & Safety Plan

SHAWMUT DESIGN & CONSTRUCTION

Job Name: Lexington Estabrook Elementary

Job #: 120255 Date: **1.16.2014**

SDC has reviewed this submittal for conformance with the contract documents and conditions of the contract.

Reviewed By: **K. Woodbury**

SHOP DWG:	☐	PRODUCT DATA:	☐
SAMPLE:	☐	REVIEW ONLY:	☒

SUBMITTAL #: **SP299 - 002-020720-2**

PCB Submittal
Estabrook Elementary School, Lexington, MA

Site Specific Health and Safety Plan

Estabrook Elementary School

Asbestos Abatement and PCB Remediation

117 Grove Street

Lexington, MA

Prepared by:

Charles Hughes

American Environmental, Inc.

18 Canal Street

Holyoke, MA 01080

December, 2013

Health and Safety Plan

The purpose of this site-specific Health and Safety Plan (HASP) is to ensure a safe working environment for American Environmental Inc. (AEI) employees, surrounding community (students and staff of Estabrook), subcontractors, surrounding environment and visitors; and to facilitate compliance with relevant governmental laws, standards and regulations relating to health, worker safety and the environment. The intent of this HASP is to identify specific hazards associated with the performance of work under the scope of the contract and to prescribe and implement technical and management solutions to protect personnel. This HASP is designed to provide the means to establish, achieve, and maintain safe working conditions through informational programs and persistent review and improvement of facilities and practices that protect the health and safety of all personnel.

This HASP provides a formal mechanism to facilitate worker protection of workers against foreseeable health and safety risks. This plan documents specific requirements and procedures for the protection of field personnel while working on the subject project. Other personnel, such as visitors and inspectors who enter areas under direct control of this task, must, at a minimum, read, understand, and comply with this plan in order to ensure their own personal safety while performing prescribed activities in controlled areas. AEI shall take all necessary precautions in order to prevent injury to the public, building occupants, or damage to property belonging to others. AEI shall meet or exceed all public safety requirements related to this project. The contents of this Health and Safety Plan will be strictly followed during this project. This HASP will be on-site at the work location while work is being performed. If revisions to this plan are required, those revisions will be incorporated into this plan.

The provisions of the plan are mandatory for all onsite employees engaged in abatement, cleaning and decontamination work associated with this project which may involve health and safety hazards.

Changing and/or unanticipated site conditions may require modification of this site safety plan in order to maintain a safe and healthful work environment. Any proposed changes to this plan should be reviewed with the AEI Health and Safety Officer prior to their implementation. Under no circumstances will modifications to this plan conflict with Federal, state, or other governmental health and safety regulations. It is not to be used for other projects or subsequent phases of this project without the written approval of the Health and Safety Officer. A copy of this plan is to be maintained at the site at all times and will be updated as necessary and when additional safety issues are discovered.

Table of Contents

Health and Safety Plan Approval

Scheduled Start-up Date: **February, 2014**	Scheduled Start-up Time: **7am**
Project Name: **Estabrook Elementary School**	Site Location: **117 Grove Street, Lexington, MA**
By signing below, the specific technical and management solutions to work site hazards prescribed herein are approved, and we commit to providing a work environment in line with AEI's Safety Plan.	
Health and Safety Plan Author: Charles Hughes	
Signature:	Date:
Project Manager: Charles Hughes	
Signatures:	Date:
Health and Safety Plan Approval	
Shawmut Design and Construction Company:	
Signature:	Date:
Representative:	
Signature:	Date:

Revision History		
Issue Date	**Revision Number**	**Reason for Change**
December 6, 2013		Original Issue
January 10, 2013	1	Edits/Comments

GLOSSARY OF TERMS, ACRONYMS, AND ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
^{o}C	centigrade
Carcinogen	a substance that can cause cancer
cc	cubic centimeter
CGI	Combustible Gas Indicator
CNS	Central Nervous System
eV	Electron Volts
^{o}F	Fahrenheit
HASP	Health and Safety Plan
HSM	Site Safety and Health Officer
kg	kilogram
LEL	Lower Explosive Limit
lpm	liters per minute
MSDS	Material Safety Data Sheet
m	meter
mg	milligram
mg/M^3	milligrams per cubic meter
ml	milliliter
mm	millimeter
ND	not detected
NIOSH	National Institute for Occupational Safety and Health
OBZ	operator's breathing zone
OEL	occupational exposure limit
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyls
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PM	Project Manager
ppb	parts per billion
ppm	parts per million
REL	NIOSH Recommended Exposure Limit
STEL	Short Term Exposure Limit
TBD	To Be Determined
TLV	Threshold Limit Value
UEL	Upper Explosive Limit
VOC	Volatile Organic Compound

1.0 Project Contact Information			
Project Title	Asbestos Abatement and PCB Remediation, Estabrook Elementary School, 117 Grove Street, Lexington, MA		
Scope of Work	Asbestos Abatement and PCB Remediation		
Key Personnel			
Project Manager	Charles Hughes	Phone	(413) 265-6527
Health and Safety Manager	Tom McQueen (Competent Person)	Phone	(413)-265-6590
Site Health & Safety Officer	Julio Bermejo (Competent Person)	Phone	(413) 265-6528
Asbestos and PCB Removal Superintendent	Julio Bermejo (Competent Person)	Phone	(413) 265-6528
Fire Department / EMS	Lexington Fire Department	Phone	**911**
Hospital (Urgent Care)	Lahey Medical Center-Lexington	Phone	(781) 372-7000

1.1 EMERGENCY AND INCIDENT RESPONSE	
Telephone location	Employee carried cellular phone & landline phone in job trailer
Site address	117 Grove Street, Lexington, MA
	Lahey Medical Center-Lexington **16 Hayden Ave** **Lexington, MA** **781-372-7000**

The above referenced hospital location will be used to provide medical treatment in the event of an injury requiring treatment services beyond the capabilities of on-site first aid or the Occupational Health Clinic identified below. On-site AEI personnel maintain current First Aid / CPR training certifications and can administer first aid services. First aid kits and safety showers are available in work areas and in the on-site emergency stations. All injuries regardless of severity must be immediately reported to the Site Health and Safety officer. Injuries requiring emergency medical treatment or ambulance services must be reported to facility security immediately.

1.2 Emergency Rally Points

1.2.1 Emergency Communications

The AEI Site Health and Safety Officer may move the selected emergency rally point as site conditions allow for a better location. The rally point's location shall be away from areas of hazard and will not be in the way of emergency responders (e.g. not in lanes of traffic or in front of fire hydrants). The rally point may be selected at a landmark, such as a parking lot or road sign. All employees, visitors, and subcontractors on site will be directed to meet at this location in the event of an emergency at the site.

The rally point for this site specific health and safety plan is in the parking lot where the Shawmut Design and Construction Trailers are located.

CLIENT: Town of Lexington/Shawmut Design and Construction

SITE NAME: Estabrook Elementary School

SITE LOCATION: 117Grove Street, Lexington, MA

PROJECT DESCRIPTION:

Asbestos Abatement: Removal and disposal of asbestos-containing-materials (ACM) from various areas of the interior and exterior of the building as identified in the pre-demolition survey performed by ECMS. The asbestos-containing materials include floor tile, mastic(s), thermal systems insulation, debris, fitting insulation, caulking/glazing and flashing. All of the interior ACM shall be removed within negative pressure enclosures equipped with HEPA-filtered ventilation equipment. Asbestos-containing exterior asbestos-containing transite, caulks/glazing and flashing shall be removed using wet methods in a clearly marked regulated area without airtight negative pressure enclosures.

PCB Remediation: Removal and disposal of PCB containing materials consist throughout the interior and the exterior of the school which is scheduled to be demolished. The PCB materials to be removed include the carpeting, brick, sealants, ceiling tiles, caulking, cove base, cove base mastic, interior paints, wood wall paneling, wood overhang, block, concrete and CMU walls. The materials which have been identified to be removed will be disposed of as PCB Bulk or Remediation Waste. In addition, American will be removing PCB "Excluded Products" which include replacement acoustical ceiling tiles, fiberglass insulation, Tectum ceiling panels, floor tile mastic and vapor barriers.

EMERGENCY INFORMATION

---- Post in Full View ----

EMERGENCY ASSEMBLY LOCATION: Shawmut Design and Construction Office Trailer

Ambulance / Fire / Police	**911**
Poison Control Center:	**(800) 222-1222**
EPA-National Response Center:	**(800) 424-8802**

Spills:	**Local USEPA Office**	**(617) 918-1111 Region One, Boston**
	State Health Department	**(617)624-6000 Boston Office**
	State Environmental Agency	**(978) 694-3320 MA DEP NE Region**

Designated Hospital: Lahey Medical Center-Lexington 781-372-7200

16 Hayden Ave, Lexington, MA

FIRST-AID MEASURES

In the event that personnel exhibit symptoms of exposure call **the appropriate numbers listed above** immediately in first-aid assessment process. Provide the following information: (Specific identity or class of contaminant e.g., asbestos dust, petroleum products, acid/base, metals, etc.)

The following general procedures will be used:

Eye Contact: Flush eye immediately with copious amount of water for a minimum of 15 minutes. Repeat until irritation is eliminated and seek medical attention.

Skin Contact: Wash exposed area with soap and water for at least 15 minutes. If dermatitis or severe reddening occurs, seek medical attention.

Inhalation: Move the person into fresh air. Seek medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

---- Post in Full View ----

In case of injury or illness:

- Check the Scene.
- If safe to do so, check the condition of the injured.
- Call 911 if the victim is unconscious or your training dictates to do so.
- Care for the injured. Always use "Universal Precautions".
- Provisions must be made to **identify the substance** to which the worker has been exposed. This information must be given to medical personnel.

---- Post in Full View ----

Important Numbers:

Site Safety and Health Officer:	Julio Bermejo	(413) 265-6528
Site Supervisor:	Julio Bermejo	(413) 265-6528
Project Manager:	Charles Hughes	(413) 265-6527
General Manager:	Tom McQueen	(413) 265-6590

Chemtrec ..... (800) 424-9300

Solid Waste and Emergency Response ..... **National Response Center at 1-800-424-8802**

(Incident Reporting)

TSCA Assistance Information Services Hotline ..... (202) 554-1404

Centers for Disease Control and Prevention (24 hr information) ..... (800) 232-4636

(Emergency Only for Healthcare Providers) ..... (770) 488-7100

Poison Control Center ..... (800) 222-1222

EPA UST Hotline ..... (800) 424-9346

DOT Hotline - Hazardous Materials Info Ctr. (9-5 EST) ..... (800) 467-4922

DOT Hotline (local) ..... (202) 366-4488

2.0 Health and Safety Policy

At AEI, our employees are our most valued asset and their safety and well-being is our greatest responsibility. It is the policy of AEI to operate in a safe and responsible manner that respects the environment and the health of our employees, our customers, and the communities where we operate. Further, it is our goal to create a safety culture among our employees which fosters an understanding he or she has the ultimate responsibility to work safely and not to compromise environmental, health, or safety values for profit or production.

It is the intent of AEI to:

- Create a work environment that is intolerant of recognized safety hazards and will ensure the protection of our employees and all others who come in contact with our operations.
- Create a work environment that enables and encourages all stakeholders to take corrective action if they observe a condition they believe to be unsafe.
- Hold accountable, employees at all levels, to manage and maintain safe work practices within their respective areas of responsibility.
- Achieve safety excellence through continuous improvement by enhancing the skill sets of our employees and developing an environment that encourages employee participation and ownership in our safety program.
- Comply with all federal, state, and / or local regulations and client rules which govern safety at the jobsite and work locations.

3.0 Health and Safety Management

AEI takes a highly proactive approach to safety, and the teams' outstanding safety record reflects a continuous dedication to excellence in this area. In addition to adherence to required regulatory training and standards, AEI implements company-specific programs across all operations and departments in a concerted effort to promote safety awareness, employee wellbeing, and the safest possible on-site work practices. AEI follows NIOSH's Hierarchy of Controls to select a preferred method to reduce or eliminate exposure to the work area hazard. The Hierarchy of controls describes that the control methods in order of preference are: elimination or substitution, engineering controls, warnings, training, and personal protective equipment.

The purpose of this plan is to assign responsibilities, establish personal protection standards and mandatory safety procedures, and provide for contingencies that may arise while operations are being conducted at the site. This plan complies with, but does not replace, State and Federal Health and Safety Regulations. This plan is to be used by AEI as a supplement to such rules, regulations, and guidance. This health and safety plan is to be augmented by the AEI Health & Safety programs policies & procedures, relevant standards from which are required to be available on site during all activities.

The provisions of the plan are mandatory for all onsite employees engaged in performance of the scope of work associated with this project which may involve health and safety hazards.

Changing and/or unanticipated site conditions may require modification of this site safety plan in order to maintain a safe and healthful work environment. Any proposed changes to this plan must be reviewed with the AEI Site Safety and Health Officer prior to their implementation. Under no circumstances will modifications to this plan conflict with Federal, state, or other governmental health and safety regulations.

3.1 Safety Program Goals

AEI's goal for this project is to achieve a zero recordable injury and illness objective, resulting in accident experience rates of zero. Our objectives are to ensure that employees are well informed in the hazards particular to the scope of work; that all employees are comfortable, confident, and knowledgeable before engaging in any task; that employees are encouraged and take ownership of participating in the safety process; and that any time a situation presents itself without a clear plan of action work will be stopped until a resolution is reached.

AEI will provide records of hazard analyses, meeting minutes, orientation sign-ins, and permit logs for tracking. These records will also be maintained on site by the Site Health and Safety Officer.

3.2 Stop Work Authority

All employees on site have the authority and responsibility to stop work for conditions that pose imminent hazard or danger. Imminent hazards are those hazards or situations, if allowed to persist, is likely to cause an accident that will result in death, serious injury, significant property damage, or environmental impairment. AEI considers no activity to be so urgent or important that its standards for environmental protection, safety, or health may be compromised. Employees have the right and responsibility not to perform tasks or activities they feel pose undue risk to themselves, co-workers, or the environment. Stop-work actions take precedence over all other priorities and procedures.

All imminent hazard situations should be resolved on the spot, if possible. The Supervisor, SHSO, and Project Manager should be involved as needed to resolve the issue. Work will not re-commence until all parties are satisfied with the resolution.

3.3 Hazard Controls and Safe Work Practices

This section provides safe work practices and control measures used to reduce or eliminate potential hazards. All AEI employees and subcontractors must remain aware of the hazards affecting them regardless of who is responsible for controlling the hazards. Work area hazards should be corrected upon discovery with an appropriate control method. AEI follows the NIOSH Hierarchy of Controls to select a preferred method to reduce or eliminate exposure to the work area hazard. The Hierarchy of controls describes that the control methods in order of preference are: elimination or substitution, engineering controls, warnings, training, and personal protective equipment. If a work area hazard is not corrected immediately, the discoverer must report the hazard to their direct supervisor or the site superintendent. All accidents, injuries and illnesses will be reported to a supervisor or the site superintendent immediately.

3.4 Health and Safety Plans

Health and Safety Plans prepared for projects contain the planned controls based on an assessment of the expected hazards to be encountered during performance of the project. It is expected that all employees and subcontractors comply with the provisions of this plan. Should new hazards be presented, they must be assessed and appropriate controls be selected following the NIOSH Hierarchy of Controls.

3.5 Task Safety & Work Plan

A Task Safety & Work Plan will be completed for major work activities such as: Asbestos Abatement and Selective Demolition. The objective of the Task Safety & Work Plan is to evaluate the hazards to be encountered while performing the task and select appropriate control measures. The TSWP will be reviewed with the work crew in a briefing / safety meeting format so each employee has the opportunity to ask questions and seek clarifications. The SHSO will attend TSWP briefings to comment.

3.6 Permitting System

Permit required confined space entry, hot work, and trenching/excavation performed at the site will require the supervisor/competent person overseeing that task to complete the appropriate permit. The permit will be turned in for review and approval before the task. The Site Health and Safety Officer or their designee will be the approver for the permit. Each permit will be completed in accordance with the requirements of the relevant OSHA standard. Permits will be logged onto a permit log including the type of permit, location, opening date and closing date. Active permits will readily available where the work will be performed. Closed permits will be returned to the Site Health and Safety Officer and the permit log will be updated.

3.7 Safety Meetings

Before the start of work on each shift, all AEI employees will attend a documented Tailgate Safety Meeting. Topics for the Tailgate Safety Meetings will be selected based on observations of behaviors or conditions from the previous week, or in response to upcoming activities. All AEI employees and subcontractors working on the site are expected and required to attend the Tailgate Safety Meeting. Each week, an All-hands Site Safety Meeting will be held with all personnel on site to review and discuss past observations of behaviors and conditions, upcoming site activities, special hazards, areas to avoid, or lessons learned.

3.8 Site Compliance Inspections

In order to ensure compliance with regulatory agencies and AEI's internal procedures and expectations, field inspections will be performed of all our projects. On all job sites Health and Safety Representatives or the Supervisor in charge will perform regular and frequent inspections of the condition of the work site. The SHSO or their designee will conduct a documented inspection each day. Any findings generated from that inspection will be recorded on the inspection form and included into the corrective action tracking log. Any deficiencies found during any inspection are to be corrected immediately. Corrective actions which cannot be completed immediately will be logged onto a tracking table for follow-up with the responsible personnel. Only items which require transfer/purchase of additional materials and/or equipment, or require follow-up meetings or training will not be corrected immediately. AEI will participate in site compliance inspections from Shawmut Design and Construction as requested.

3.9 Safety Interventions

AEI empowers its employees to intervene whenever they see someone exhibiting an unsafe behavior or working in unsafe conditions. When such a situation is observed, an intervention is conducted by discussing with the person how the task could be performed safely. Unsafe conditions will be corrected immediately, and any condition requiring the purchase of new tools and equipment will require a temporary task stand-down until the correct equipment is available. Unsafe behaviors may be corrected through coaching or re-training. As needed, the observer can involve the Supervisor or local management to resolve the issue.

3.10 Site Safety Orientation

All employees, visitors, and subcontractors to the site must attend a Site Safety Orientation before being allowed to enter into the site. The objective of the site safety orientation is to review the requirements and objectives of this Health and Safety Plan and to familiarize the attendees with the scope of work in progress. Orientation will be performed by the SHSO or his designee, Orientation sessions will be scheduled internally to accommodate new personnel as they need access to the site. An orientation sign in sheet will be completed for each session for inclusion into the project files. Representatives from Shawmut Design and Construction will be invited to participate in orientation sessions, as necessary.

3.11 Incident Investigations

Careful investigation of incidents to determine root causes and identify corrective actions is paramount to prevent the recurrence of that incident. All employees must immediately report near misses, injuries, and illnesses to the SHSO and to the facility guards via radio if outside emergency assistance (e.g. ambulance) is needed.

Procedures for investigating workplace accidents and hazardous substance exposures include:

1. Visiting the accident scene as soon as possible;
2. Interviewing injured workers and witnesses;
3. Examining the workplace for factors associated with the accident/exposure;
4. Determining the cause of the accident/exposure;
5. Taking corrective action to prevent the accident/exposure from reoccurring; and
6. Recording the findings and corrective actions taken.
7. AEI will actively participate and assist in any accident investigation

The progress of investigations will be communicated regularly to Shawmut Design and Construction representatives. An initial report will be submitted within 24 hours of the incident with a final written report to be submitted within 7 days of the incident.

3.12 Employee Progressive Discipline Policy

AEI shall provide a uniform approach to the administration of discipline for health and safety issues, in the belief that discipline is corrective and not a negative breach of policy or unacceptable work practice. The procedure to follow is:

1. **Verbal warning** – Administered when supervisor and/or responsible person determines that an employee has violated a health and safety requirement. The supervisor should:

- Inform the employee of the policy/procedure that has been violated,
- Ask the employee to respond to "why did the violation occur"?, and
- Report the verbal warning to SHSO.

2. **Written Warning** – Administered when the employee has received a previous verbal warning or when a health and safety infraction occurs. All written warnings should contain the following:

- Date of infraction
- Description of violation
- Description of acceptable practice
- Corrective action to be taken
- Result of further violation (i.e. additional written warnings, suspension or termination)
- Employee's signature

3. **Removal from Project** – Administered when health and safety policy and procedure violations warrant immediate removal of an employee from a work area. Such violations would include flagrant misconduct that places that employee or another employee at risk of a serious injury. Such violations will result in removal from the project. At AEI's discretion, disciplinary suspension may also result from these violations. At no point will the removed employee be allowed to return to the project. No employee should be discharged without notifying and obtaining prior approval from the responsible person and/or the Human Resources Director.

The following is a list of acts which may result in written warning, suspension or removal from project. In the event employee is a subcontractor, that subcontractor will be placed on stand down until AEI is satisfied they have corrected the deficiency.

- Not wearing required Personal Protective Equipment
- Failing to provide a fire watch or to use a fire blanket when spark-producing
- Failing to remove a "DO NOT OPERATE," "DANGER," "WARNING," or "CAUTION" tag once the work is completed
- Using a hand tool other than for its designed purpose
- Failing to properly protect welding leads or burning hoses
- Raising or lowering electrical or pneumatic tools from elevated work areas by the power cord or hose
- Using an extension ladder whose side rails do not extend 36 inches above the landing
- Failing to use required seat belt while operating mobile equipment
- Traffic violations including failure to obey signs and speeding
- Failing to inspect equipment prior to daily use
- Damaging, disabling, or tampering with a ventilation system
- Failing to use a tag line to control suspended loads
- Stacking materials closer than 6 feet to an unprotected floor opening or roof edge.
- Failing to post warning signs and barricades under areas where debris is being dropped through holes in a structure without using chutes
- Working at unprotected heights without the proper use of a Personal Fall Arrest System
- Working above vertically protruding reinforcing steel that is unprotected
- Disregarding a "DO NOT OPERATE," "DANGER," "WARNING," or "CAUTION" sign when conditions or activities endanger your life or the lives of others
- Removing another worker's lockout lock or tag
- Using rigging equipment in excess of its recommended safe workload or rigging is visibly defective
- Intentionally altering a guard or safety device on equipment or hand tools
- Entering permit-required confined spaces without obtaining the proper permits

- Welding or cutting in areas or on objects without a hot work permit or without a fire watch present
- Performing work on energized circuits without following appropriate energy control, lockout/tagout, or line entry procedures
- Standing on the mid-rail while using an aerial lift
- Operating equipment without proper training
- Working in a trench or excavation more than 5 feet deep without proper permit or implementation of appropriate protective measures
- Knowingly operating equipment with faulty or defective safety devices
- Disabling a fire protection system without being authorized by Fire Department or having a line entry permit
- Using metal or conductive ladders near energized lines or equipment
- Failing to properly secure a ladder
- Unauthorized removal of scaffold bracing and/or supports while scaffold is being used
- Using an electrical tool in wet conditions without taking the proper precautions to prevent electrical shock (Ground Fault Circuit Interrupters)

3.13 Subcontractor Safety Prequalification

All subcontractors on site will be required to provide the proper insurance and EHS worker training prior to beginning any work on site. Furthermore, each subcontractor will be required to participate or provide for review AHA's for work activities. AEI will require all subcontractors to acknowledge receiving the SSHASP and that they and their employees have read it and are subject to questioning regarding their understanding of it.

3.14 Daily Crew Tailgate Meetings

Each day, a safety topic will be chosen for review with all AEI personnel, vendors and contractors working on site. The topic will be chosen in response to observations of site conditions or observed work practices in order to correct deficiencies. These observations and meetings will be used to further promote a culture of hazard recognition with all team members.

4.0 Corrective Action Program

AEI will use a Corrective Action Program to capture, and report both safe and unsafe behaviors (actions), safe and unsafe conditions, and other safety concerns. These observations will be tracked and utilized in weekly/daily safety discussions with the work force and will be used as a teaching mechanism for the safety meeting.

4.1 Definitions

"**Incident**" - Event which resulted in property damage, damage to the environment, or an injury.

"Injury" - A traumatic wound or other condition of the body caused by external forces, including stress or strain. The injury is identifiable to time and place of occurrence and member or function of the body affected, and is caused by a specific event or incident or series or events or incidents within a single day or work shift.

"Lost Workday Case" - A nonfatal traumatic injury that causes any loss of time from work beyond the day or shift on which it occurred, or any illness / disease that causes loss of time from work or inability to carry out the employee's normal duties.

"Medical Treatment" - Any treatment (other than first aid) administered by a physician or by registered professional medical personnel under orders of a physician.

"**Near Miss**" - An event where no personal injury or environmental damage occurred, but where, given a slight shift in time or position, injury and/or damage easily could have occurred.

"Recordable Injury/Illness" - Any work-related injury/illness that results in death, unconsciousness, days away from work, restricted work, transfer to another job or requires medical treatment beyond first aid.

"Unsafe Behavior" - Performance of a task or other activity that is conducted in a manner that may threaten the health and/or safety of workers.

"Unsafe Condition" - Unprotected hazards in the workplace, which if left uncorrected, may lead to an accident.

4.2 Observation Reporting

All personnel on site have the authority to report observations of both safe and unsafe behaviors, site conditions, and other safety concerns. Any observations or concerns verbally reported to site management will be transcribed onto a report form for proper recording and tracking.

5.0 Chemical Hazards

There are two categories of chemical/ biological hazards associated with site activities:

- Site Constituents
- Chemicals used to conduct the site work, i.e. Hazard Communication Materials

Site constituents are those that exist at the site and are the cause for conducting site activities. The chemicals that are brought on site in order to conduct the work may be hazardous and subject to regulation under OSHA's Hazard Communication Standard (29 CFR 1926.59).

From an occupational health standpoint, the levels of contaminants that have been, or could be, encountered during site activities should not represent a significant concern if the provisions of this HASP are appropriately implemented. However, the potential for exposure to elevated levels of these contaminants may exist. Overviews of the hazards associated with exposure to elevated levels of these contaminants may exist. Overviews of the hazards associated with exposure to the chemicals that may pose a hazard during site activities are presented below in terms of the following types of occupational exposure limits:

PEL - Permissible Exposure Limit (OSHA Standard)

TLV - Threshold Limit Value (ACGIH Guidance)

REL - Recommended Exposure Limit (NIOSH Guidance)

STEL- Short Term Exposure Limit

C - Ceiling

OSHA Permissible Exposure Limits (PELs), ACGIH Threshold Limit Values (TLVs), and NIOSH Recommended Exposure Limits (RELs) are time-weighted averages (TWAs) defined as concentrations for a normal 8-hour work day and 40-hour work week to which almost all workers can be repeatedly exposed without suffering adverse health effects

Short Term Exposure Limit (STEL) is defined as the concentration to which workers can be exposed for short time periods without irritation, tissue damage, or narcosis sufficient to likely cause impairment of self-rescue or precipitate accidental injury. The STEL is a 15-minute time-weighted average that should not be exceeded at any time during the workday.

A ceiling value (C) is a concentration that should not be exceeded at any time in any workday. Ceiling limits are used by OSHA, ACGIH and NIOSH for chemical exposure criteria.

Summaries on the site constituents of concern follow.

5.1 Asbestos

PEL/TLV/REL = 0.1 fiber/cm^3 STEL (excursion limit) = 1 fiber/cm^3

"Asbestos" is the name of a class of magnesium-silicate minerals that occur in fibrous form. Minerals that are included in this group are chrysotile, crocidolite, amosite, anthophyllite asbestos, tremolite asbestos, and actinolite asbestos. The potential for an asbestos-containing product to release breathable fibers depends on its degree of friability. "Friable" means that the material can be crumbled with hand pressure and is therefore likely to emit fibers. Materials such as asbestos containing insulation are generally considered friable. The main organ affected by the toxicity of asbestos is the lung. There is still a question if asbestos causes cancer at other sites. Gastrointestinal and laryngeal cancers are possibilities, but their relationship with asbestos exposure hasn't been established yet. There is no supporting evidence for cancer at other body sites at this time. It is known that asbestos exposure can cause visceral and parietal pleural changes in the lungs. Asbestos is neither volatile nor soluble; however, small fibers may occur in suspension in both air and water, making inhalation and ingestion possible. Occupational studies have found that asbestos exposure via inhalation can cause lung cancer and mesothelioma (a rare cancer of the membranes lining the abdominal cavity and surrounding internal organs). Ingestion-Epidemiological studies have found exposure to asbestos in drinking water can cause cancer of the esophagus, stomach, and intestines.

All suspect materials such as cementitious siding (e.g. Transite®), bituminous coated sheeting materials (e.g. Galbestos), insulation, gaskets, floor tiles, mastics, etc. will be considered asbestos-containing until proven otherwise by the provided asbestos survey.

5.2 Lead

PEL = 0.05 mg/m^3 TLV = 0.05 mg/m^3

Lead may be present in some of the painted surfaces on site. Lead may also be present in Raw Product yellow and orange pigments. Lead is a potent, systemic poison. Some common symptoms of chronic overexposure include loss of appetite, metallic taste in the mouth, anxiety, constipation, nausea, pallor, excessive tiredness, weakness, insomnia, headache, nervous irritability, muscle and joint pain or soreness, fine tremors, numbness, dizziness, hyperactivity and colic. In lead colic there may be severe abdominal. Toxic levels of exposure may have delayed symptoms. Damage to the central nervous system in general and the brain in particular is one of the most severe forms of lead poisoning. The primary routes of entry into the body expected at this site are inhalation and ingestion. The inhalation hazard will be controlled through the use of engineering controls including wetting and/or covering of exposed soils as well as respiratory protective equipment. To control the ingestion hazard all employees will undergo personal decontamination while they are leaving the active work area, and will wash their hands before eating, drinking, or smoking.

AEI will assume that all painted surfaces may be lead-containing until proven otherwise. Wherever possible, the local control method used will be to cut materials with a mechanical shear attachment. Torch cutting of materials will be kept to a minimum during demolition activity. When torch cutting is mandatory, employees will wear respiratory protection and local dilution ventilation can be used indoors. Painted concrete or masonry products will be assumed to be lead-containing until proven otherwise. Local control methods will be the use of respiratory protection, local dilution ventilation, or wet methods as appropriate.

5.3 Crystalline Silica

PEL = Based on composition TLV = Based on composition REL = 0.05 mg/m^3

Crystalline silica is a basic component of soil, sand, granite, and many other minerals. Inhaling finely divided crystalline silica dust in very small quantities over time can lead to silicosis, bronchitis or in some cases cancer, as the dust becomes lodged in the lungs and continuously irritates them. The chronic inhalation of silica dust causes the dust to build up in the lungs, eventually reducing lung capacities. Silica may be present in concrete products on site and cutting, breaking, or pulverization may have reduced the silica to respirable sizes. Absorption and ingestion are not as concerning as inhalation of silica dusts, but good personal hygiene practices will lessen potential exposures by these routes.

5.4 Mercury (in fluorescent light bulbs)

PEL = 0.1 mg/m^3 (ceiling) TLV = 0.025 mg/m^3 REL = 0.05 mg/m^3 (skin)

Mercury may be present in fluorescent light tubes located throughout the work area. The primary routes of exposure are inhalation and ingestion. The symptoms of overexposure to mercury may include such personality manifestations as: irritability, excitability, or excessive timidness. Other symptoms include: headaches, drowsiness or insomnia, weakness, and pink disease (acrodynia), which causes skin, especially on hands and feet to turn pink. Many cases also include reports of sore mouths, excessive salivation, and perspiration. In mercury intoxication, a common symptom is a tremor, which is aggravated by emotion or excitement. Also included in the literature as symptoms of mercury intoxication are: loss of appetite, weakness, digestive disorders, kidney damage, and bleeding gums.

5.5 Polychlorinated Biphenyls

PEL/TLV = 0.5 mg/m^3 (54% Chlorine), 1 mg/m^3 (49% Chlorine) REL = 0.001 mg/m^3

Polychlorinated biphenyls (PCBs) are a family of chemicals commonly used as coolants and insulating fluids for transformers and capacitors. PCB may be present in certain caulking, mastics, paint and transformers as referenced in the Scope of Work. AEI will follow CFR 761, Subpart S when removing PCB Materials. The most commonly observed health effects in people exposed to PCBs are skin conditions such as chloracne and rashes, known to be symptoms of systemic poisoning. Exposure to PCBs has been shown to cause fatigue, headaches, coughing, and changes in blood and urine that may indicate liver damage. PCBs are considered to be a suspected human carcinogen by both the U.S. Environmental Protection Agency (EPA) and the International Agency for Research on Cancer (IARC), and are classified as probably human carcinogens by the National Cancer Institute, World Health Organization, and Agency for Toxic Substances and Disease Registry. The PCBs are expected to be encountered in some of the fluorescent light electrical ballasts, caulking, mastics, glues, paints and should be contained within the ballasts as long as they remain undamaged.

5.6 Hazard Communication Materials

Chemical products that are regulated under the OSHA Hazard Communication Standard (29 CFR 1926.59) may be used during this project. In accordance with the Hazard Communication Program, the MSDSs for the hazardous materials listed below will be maintained at the worksite.

A copy of AEI's written Hazard Communication program will be maintained on site. AEI will use a combination of hard copy binders and an internet accessible MSDS system to make MSDS readily available to all employees while working on the site.

The chemical inventory on site will be initially and periodically audited to keep the MSDS collection current. Any purchases of new chemical products will require a MSDS before it is used on site. A master MSDS binder of products used during performance of the project will be located in AEI's administrative trailer.

6.0 Physical Hazards

Physical hazards at this work site include:

- CRUSHED BY FALLING DEBRIS
- HEAT STRESS FROM PPE USAGE
- SLIP-TRIP TYPE OF ACCIDENTS
- FALLS FROM ELEVATION
- BACK INJURIES DUE TO IMPROPER LIFTING
- BEING CAUGHT IN OR STRUCK BY MOVING EQUIPMENT
- ELECTROCUTION HAZARDS SUCH AS CONTACT WITH TEMPORARY POWER CORDS
- LACERATION HAZARDS FROM SHARP TOOLS OR METAL EDGES
- MUSCLE STRAINS FROM HANDLING HEAVY ITEMS
- STRUCK BY
- COLD WEATHER STRESS

6.1 General Work Area Hazards

General work area hazards should be corrected upon discovery with an appropriate control method. AEI follows the NIOSH Hierarchy of Controls to select a preferred method to reduce or eliminate exposure to the work area hazard. The Hierarchy of controls describes that the control methods in order of preference are: elimination or substitution, engineering controls, warnings, training, and personal protective equipment. If a work area hazard is not corrected immediately, the discoverer must report the hazard to their direct supervisor or the site superintendent. All accidents, injuries and illnesses will be reported to a supervisor or the site superintendent immediately.

The following are safe work practices that should be followed while decontamination activities are underway.

- Do not operate a piece of equipment or hand tool unless you have been properly trained in its use and the safety hazards associated with it. Follow the manufacturer's instructions when operating all machinery and tools.
- Do not remove tool guards or any other safety guard that is attached to the equipment.
- All tools should be checked at the beginning of the each shift to assure that all parts, equipment, and accessories that effect the safe operation are in proper operating order. If defects are found with the equipment, that equipment shall not be used until properly repaired.
- Personnel should stay clear of the areas where demolition of overhead objects is being performed.
- Stay out of areas identified by “danger” or “caution” tape, barricades, or barriers unless the area supervisor has granted you access.

- Personnel should minimize trip and fall hazards by being aware of their surroundings, using fall protection equipment when required, collecting miscellaneous debris from the work area, and storing materials and debris in a safe and organized manner.
- Debris containing sharp objects such as sheet metal shall be removed from the work area as soon as possible. All debris shall be placed in an area away from the work area and in a safe storage place.
- All safety equipment shall be worn as outlined.
- All unauthorized personnel will remain outside of the work area away from any hazardous activities.

6.2 General Practices and Housekeeping

An orderly and organized worksite is safer and more efficient than a disorganized one. General "good housekeeping" practices include:

- Walkways and common paths of travel including stairs and scaffolds should be established and kept free from the accumulation of materials.
- Access to aisles, exits, ladders, stairways, scaffolding, and emergency equipment should be kept free from obstructions and obstacles.
- Keep walkways free from slipping hazards such as spilled liquids, snow, or ice.
- Specific areas should be designated for the proper storage of materials and equipment.
- Return tools and equipment to the job boxes when done using them.
- As work progresses, scrap and unessential materials must be neatly stored or removed from the work area.
- Place trash and debris into appropriate containers and empty those containers on a daily basis.
- Clean up leaks and spills of liquids immediately.

6.3 Site Control

AEI uses a support zone method to provide control over the work areas. These progressively increase the safety requirements as workmen get closer to the equipment cleaning, abatement, or selective demolition to be performed.

6.3.1 Support Zone

AEI will establish work zones prior to commencement of Site activities. Areas outside the work areas will be used as the support Zone (SZ) and will include areas for Site personnel and visitors to conduct activities outside the work areas. The support zone will be an area near the parking lot at an agreed location within the facility. In general, Personal Protective Equipment will not be required in the front parking lot trailer area.

All employees, subcontractors, vendors, and visitors traveling into the project site will be required to wear appropriate work clothing (e.g. pants and sleeved shirts), ANSI Z41 approved protective footwear, ANSI Z89.1 approved hard hats, and ANSI Z87.1 eye protection with side shields. Hearing protection will be worn as appropriate. High visibility vests will be worn at dusk and dawn, or when working adjacent to operating heavy equipment.

6.4 Heat Stress Recognition and Control

Due to the expected project there may be occasion for workers on site to be exposed to thermal stress from both warm and cold environments, weather dependent. Both hot and cold environments can have negative health impacts on workers who are exposed to those environments for extended durations. The AEI trailer will be available as a location for employees to "cool down" or "warm up" during breaks. In addition, cool down stations will be constructed adjacent to work areas during the warmer months

Symptoms and treatment of heat stress are summarized in the table below.

Type of Heat Stress	Signs and Symptoms	Treatment
Heat Syncope	Sluggishness or fainting while standing erect or immobile in heat.	Remove to cooler area. Rest lying down. Increase fluid intake. Recovery usually is prompt and complete.
Heat Rash	Profuse tiny raised red blister-like vesicles on affected areas, along with prickling sensations during heat exposure.	Use mild drying lotions and powders, and keep skin clean for drying skin and preventing infection.
Heat Cramps	Painful spasms in muscles used during work (arms, legs, or abdomen); onset during or after work hours.	Remove to cooler area. Rest lying down. Increase fluid intake.
Heat Exhaustion	Fatigue, nausea, headache, giddiness; skin clammy and moist; complexion pale, muddy, or flushed; may faint on standing; rapid thready pulse and low blood pressure; oral temperature normal or low.	Remove to cooler area. Rest lying down, with head in low position. Administer fluids by mouth. Seek medical attention.
Heat Stroke	Red, hot, dry skin; dizziness; confusion; rapid breathing and pulse; high oral temperature.	Cool rapidly by soaking in cool – but not cold – water. Call ambulance and get medical attention immediately.

Drink small amounts of water on a frequent basis to prevent dehydration. Do not rely on a feeling of thirst. Drink 2 cups of water every 30 minutes. Get adequate sleep and avoid alcohol. A hangover increases the need for more water in your body. You may be at greater risk for heat stress. Take more frequent breaks when working in hot environments.

6.4.1 Monitoring Heat Stress

Each day the weather forecast should be monitored for both temperature and humidity. These procedures should be considered when the ambient air temperature is or is expected to exceed 70°F, with relative humidity >50%, or when workers exhibit symptoms of heat stress.

6.4.2 Rest Areas

Providing cool rest areas in hot work environments considerably reduces the stress of working in those environments. There is no conclusive information available on the ideal temperature for a rest area. However, a rest area with a temperature near 76 degrees F appears to be adequate and may even feel chilly to a hot, sweating worker, until acclimated to the cooler environment. The rest area should be as close to the workplace as possible. Individual work periods should not be lengthened in favor of prolonged rest periods. Shorter but frequent work-rest cycles are most beneficial to the worker. Cooling stations will be constructed around the site near where work is performed. As demolition work progresses around the site, cooling stations will be moved to be in proximity to where work is being performed. Each cooling station shall consist of a shaded area with overhead protection from the sun, and a water misting or air conditioning system to allow for a cooling environment. During summer months where heat indices exceed 110 degrees, AEI will stage air conditioned break trailers at the site.

6.4.3 Work / Rest Schedules & Hydration Program

In the course of a day's work in the heat, a worker may produce as much as 2 to 3 gallons of sweat. Because so many heat disorders involve excessive dehydration of the body, it is essential that water intake during the workday be about equal to the amount of sweat produced. Most workers exposed to hot conditions drink fewer fluids than needed because of an insufficient thirst drive. A worker, therefore, should not depend on thirst to signal when and how much to drink. Sufficient potable water must be readily available to all workers. Individual drinking cups should be provided – never use a common drinking cup. AEI will monitor changes in the daily temperature according to the reported NOAA Heat Index. The following chart outlines fluid replenishment requirements and work/rest schedules according to the NOAA Heat Index

Table: Heat Injury Prevention Measures using NOAA Heat Index

	Work/Rest	Water Consumption Requirement
White Conditions	**Light Activity: Continuous**	**Light Activity: ¼ quart (1 cup) per hour**
	Moderate Activity: Continuous	**Moderate Activity: ¼ quart (1 cup) per hour**
	Heavy Activity: Continuous	**Heavy Activity: ¼ quart (1 cup) per hour**
Yellow Conditions	**Light Activity: 55 min work /5 min rest**	**Light Activity: ¼ quart (1 cup) per hour**
	Moderate Activity: 50 min work /10 min rest	**Moderate Activity: ½ quart (2 cups) per hours**
	Heavy Activity: 45 min work /15 min rest	**Heavy Activity: ¾ quart (3 cups) per hour**
Orange Conditions	**Light Activity: 50 min work /10 min rest**	**Light Activity: ½ quart (2 cups) per hour**
	Moderate Activity: 45 min work /15 min	**Moderate Activity: ¾ quart (3**

	rest	**cups) per hour**
	Heavy Activity: 30 min work /30 min rest	**Heavy Activity: 1 quart (4 cups) per hour**
Red Conditions	**Light Activity: 45 min work / 15 min rest**	**Light Activity: ¾ quart (3 cups) per hour**
	Moderate Activity: 30 min work / 30 min rest	**Moderate Activity: 1 quart (4 cups) per hour**
	Heavy Activity: 15 min work / 45 min rest	**Heavy Activity: 1-1/2 quarts (4.5 cups) per hour**

During NOAA Heat Index Red Conditions AEI will severely restrict or stand down operations which expose employees to high radiant heat (e.g. work on roofs, long work portions on asphalt) or to high solar load (e.g. lengthy time outside without shade or cooling).

6.5 Cold Stress

Prolonged exposure to freezing or cold temperatures may cause serious health problems such as trench foot, frostbite and hypothermia. In extreme cases, including cold water immersion, exposure can lead to death. Danger signs include uncontrolled shivering, slurred speech, clumsy movements, fatigue and confused behavior. If these signs are observed, call for emergency help.

When the body is unable to warm itself, cold related stress may result. This may include tissue damage and possibly death. Four factors contribute to cold stress: cold air temperatures, high velocity air movement, dampness of the air and contact with cold water surfaces. A cold environment forces the body to work harder to maintain its temperature. Cold air, water and snow all draw heat from the body. Wind chill is the combination of air temperatures and wind speed. For example, when the air temperature is 40F, and the wind speed is 35mph, your exposed skin receives conditions equivalent to the air temperature being 11F. While it is obvious that below freezing conditions combined with in adequate clothing could bring about cold stress, it is also important to understand that it can also be brought about by temperatures in the 50's coupled with some rain and wind.

Employers should take the following steps to protect workers from cold stress:

- Schedule maintenance and repair jobs in cols stress area for warmer months.
- Schedule cold jobs for the warmer part of the day.
- Reduce the physical demands of workers.
- Use relief workers or assign extra workers for long, demanding jobs.
- Provide warm liquids to workers.
- Provide warms areas for use during break periods.
- Monitor workers who are at risk of cold stress.
- Watch for signs of cold stress and allow workers to interrupt their work if they become uncomfortable.
- Provide cold stress training that includes information about
    - Worker risk

- Prevention
- Symptoms
- The importance of monitoring yourself and coworkers for symptoms
- Treatment
- Personal Protective equipment

Symptoms and treatment of cold stress are summarized in the table below.

Symptoms and Treatment of Cold Stress

Type of Cold Stress	Signs and Symptoms	Treatment
Hypothermia	Shivering, fatigue, loss of coordination, confusion and disorientation. Symptoms can vary depending on how long you have been exposed to the cold temperatures. Late symptoms of severe hypothermia include, no shivering, blue skin, dilated pupils, slowed pulse and breathing and loss of consciousness.	Move to warm are and stay active. Remove wet clothes and replace with dry clothes or blankets, cover the head. Drink a warm (not hot) drink Avoid caffeine. For more severe cases, do all of the above, plus contact emergency and cover all extremities completely. .
Frostbite	Reduced blood flow to hands and feet, numbness, tingling or stinging, aching and bluish or pail, waxy skin.	Get into a warm room as soon as possible, do not walk on frostbitten feet or toes – this increases the damage, Immerse the affected area in warm (not hot) water, warm the affected area using body heat; for example, the heat of an armpit can be used to warm frostbitten fingers. Do not rub or massage the frostbitten area. Do not use a heating pad, heat lamp, or the heat of a stove, fireplace, or radiator for warming. Affected area are numb and can be easily burned.
Trench Foot	Reddening of the skin, numbness, leg cramps, swelling, tingling pain, blisters or ulcers, bleeding under the skin, gangrene (the foot may turn dark purple, blue, or gray).	Remove shoes/boots and wet socks. Dry the feet. Avoid walking on feet, this may cause tissue damage.
Chilblains	Redness, itching, possible blistering, inflammation, possible ulceration in severe cases.	Avoid scratching, slowly warm the skin, use corticosteroid creams to relieve itching and swelling and keep blisters and ulcers clean and covered.

6.6 Fire Prevention

Housekeeping shall be maintained to limit the accumulation of combustible materials at the work site. If a fire occurs, employees must notify their Supervisor or sound air horn as a fire alarm in a series of 3 short blasts, followed by a 10 second pause, then repeat. Employees hearing an alarm must stop work safely

and evacuate the building. No employee should try to put fires out unless they have been specially trained and designated to do so. Fire extinguishers shall be kept clear. To protect against fires, the following special precautions must be taken:

- Type ABC fire extinguishers will be available on site to contain and extinguish small fires. The local fire department shall be summoned in the event of any fire on site.
- Fire Extinguishers shall be provided so that the travel distance from any work area to the nearest extinguisher is less than 50 feet. Fire extinguishers must also be present on aerial lifts and heavy equipment.
- Extinguishers must 1) be fully charged and in operable condition 2) be visually inspected each month, and 3) undergo a maintenance check each year. Never use an extinguisher past its annual maintenance check (paper tag).
- Keep the area in front of the extinguisher clear.
- Combustible materials stored outside should be at least 10 feet from any building.
- Solvent waste and oily rags must be kept in a fire resistant covered container until removed from the site.
- Flammable/combustible liquids must be kept in approved containers (fuel tanks or safety cans). All containers must be labeled as to their contents. Protective measures for handling flammable/combustible liquids are found in the Fire Safety & Egress Program.
- Smoking is allowed only in designated areas.
- No spark sources (vehicles, operation of power tools, etc.) are allowed within 50 feet of the Factory 1, 2, or 3 Cooling Towers.
- All hot work must be performed within the requirements of the hot work permit.

6.7 Noise Hazards

Previous surveys indicate that the equipment used for this work may produce continuous and impact noise at or above the action level of 85 dBA. All personnel within 25 feet of operating equipment, or near an operation that creates noise levels high enough to impair conversation, shall wear hearing protective devices (either muffs or plugs). All personnel are in the AEI's Hearing Conservation Program and have had baseline and, where appropriate, annual audiograms. Personnel should wash their hands with soap and water prior to inserting earplugs to avoid initiating ear infections.

6.8 Slip / Trip & Fall Hazards

Following the NIOSH Hierarchy of controls, slip/trip & fall hazards will be eliminated by design whenever possible. This design may include phasing of work to eliminate fall hazards or modifying the work plan to accommodate doing some demolition/materials handling tasks at ground level rather than at elevation.

Workers should exercise caution when walking around the site to avoid fall and trip hazards. If items are located in the work area, which could cause site personnel to fall or trip, they must be addressed promptly. Workers should watch where they are walking and plan the route to walk in areas of good stability.

Immediate clean up all spills on walking/working surfaces; take care during and after floor cleaning.

When work is to be performed from elevation 6 feet or higher from a lower elevation (construction standard), AEI will select personal fall arrest as the fall protection method whenever possible. Whenever personal fall arrest is to be employed it is the responsibility of the competent person to coordinate with the SHSO to ensure that an adequate fall protection anchor point can be used. Where structural steel members are accessible, AEI will use beam straps or beam clamps to provide an anchor point. If needed, AEI will begin removal of asbestos-cement sheet products or roofing to allow access to structural steel members. On wooden roofs or timber frame construction, AEI will use an anchor point designed for that use. In all cases, AEI will follow the manufacturer's specification(s) when installing anchor points. If the roof is suspected to be of poor structural integrity and possibly unsuitable to support the weight of workers on the roof, asbestos containing roofing removal will be performed from aerial lift or scaffolding, or from underneath if necessary. All workers at elevation must have documented fall protection training, either as stand-alone training or as the required part of an OSHA 10 or 30 Construction Outreach course.

Any employees operating or working from inside of an aerial lift (including boom, articulated, or scissors lift) will have documented aerial lift training and will be required to wear a personal fall arrest or positioning system. All work must be performed while standing firmly on the floor of the lift basket, and care must be taken to avoid trip and slip conditions from tools or poly sheeting on the floor of the lift basket. Prior to operation of the lift, the area to accommodate the lift must be evaluated for existing site hazards such as overhead members, floor loading, and any holes/ditches/floor openings/slopes which could lead to a tip-over of the lift. At no point will the man basket be loaded beyond the manufacturer's limitations. All personnel, tools and materials must be included in the weight calculation.

Personal fall arrest equipment will be inspected by the trained user prior to each use. Each piece of personal fall arrest equipment will also receive an annual inspection from a qualified person. Any pieces of fall arrest equipment which are found to be frayed, damaged, or were involved in a fall will be immediately removed from service and replaced.

6.9 Material Handling / Lifting Hazards

Strains and sprains in backs and extremities possible due to overexertion in lifting, pulling and pushing loads. Workers shall have training in proper lifting techniques and back injury prevention. Employees must get assistance when lifting irregular shaped or heavy objects and use proper lifting techniques. Multiple cases must be handled on a pallet with a pallet jack or a forklift. Use of handcarts and other mechanical material handling devices is recommended. Exercise care to avoid overexertion.

The following guidelines will be followed whenever lifting equipment or any other objects that are of odd size or shape, or that weigh over 40 pounds.

All workers shall follow these basic guidelines when lifting:

- Get help when lifting heavy loads. Heavy items will only be lifted using a two-person lift.
- When moving heavy objects such as drums or containers, use a dolly or other means of assistance.
- Plan the lift. If lifting a heavy object, plan the route and where to place the object. In addition, plan communication signals to be used (i.e., "1,2,3, lift," etc.)
- Wear sturdy shoes in good conditions that supply traction when performing lifts.
- Keep your back straight and head aligned during the lift and use your legs to lift the load – do not twist or bend from the waist. Keep the load in front of you – do not lift or carry objects from the side.

- Keeping the heavy part of the load close to your body will help maintain your balance.

6.10 Electrical Hazards

The Site Superintendents are responsible to see that utility locations are identified prior to the commencement of any activities. Resources include site plans, and facility maintenance personnel. The superintendent should field verify the deactivation of utilities, and the verification should be retained in project documentation.

Work shall not be initiated until operations are coordinated with facility personnel and power has been shut off by positive means (e.g. lockout/tag out) to prevent lines from being energized. Wherever possible, the AEI Site Superintendent will observe power shut off and place a lock and tag on the switch. In all cases the Site Superintendents shall verify the deactivation of utilities, and written certification retained in the project files. The Site Superintendent or SHSO must also verify power shut off by checking that power is no longer available to the affected equipment.

Only qualified personnel shall make electrical repairs or installations. Keep a safe distance from live electricity. All electrical equipment must be properly grounded. Use only three wire grounded receptacles and extension cords. Use Ground Fault Circuit Interrupter (GFCI) circuit breakers on all 110V power sources.

All electrical wiring and equipment must be considered energized until lockout/tagout procedures are implemented. No line may be cut without field testing by voltage meter or circuit continuity detector to verify de-energization.

Inspect electrical equipment, power tools, and extension cords for damage prior to use. Red-tag out any defective electrical equipment, remove from service and ship back to the warehouse for repair.

All temporary wiring, including extension cords and electrical power tools must have ground fault circuit interrupters (GFCI) installed.

Extension cords must be equipped with third-wire grounding. Cords must be covered, elevated, or protected from damage when passing through work areas, and protected from pinching if routed through doorways. Do not fasten with staples, hang from nails, or suspend with wire.

Electrical power tools and equipment must be effectively grounded or double-insulated with UL approval.

Maintain safe clearance distances between overhead power lines and any electrical conducting material unless the lines have been de-energized and grounded, or where insulating barriers have been installed to prevent physical contact. Maintain at least 10 feet from overhead power lines for voltages of 50 kV or less, and 10 feet plus 1/2 inch for every 1kV over 50 kV.

6.11 Hot Work

Propane/Oxygen torches may be used for demolition of building mechanical systems. Injuries associated with hot work include:

- Burns
- Eye injuries
- Exposure to toxic fumes
- Fire and explosion hazards

Employees must wear proper PPE including gloves and flame resistant long sleeve clothing. Appropriate tinted eye protection shall be used. An initial exposure assessment shall determine the level of respiratory protection to be used when torch-cutting any coated metals. The areas surrounding the torching activity and where sparks are falling shall be kept wet when feasible and a fire extinguisher is to be located in the work area. A fire watch will be posted for a minimum of 30 minutes after cutting. Hot work performed in areas where sparks or heat may travel into an enclosed space, or space with poor visibility may need to have the fire watch posting increased to 1 – 2 hours. The adjacent spaces to where hot work will be performed will be evaluated during completion and approval of the hot work permit.

All hot work must be performed under the hot work permit program.

6.12 Compressed Gas Cylinders

Safety measures pertaining to handling gas cylinders include:

- Valve caps must be in place when cylinders are transported, moved, or stored.
- Cylinder valves must be closed when cylinders are not being used and when cylinders are being moved.
- Cylinders must be secured in an upright position at all times.
- Cylinders must be shielded from welding and cutting operations and positioned to avoid being struck or knocked over; contacting electrical circuits; or exposed to extreme heat sources.
- Cylinders must be secured on a crate, basket, or pallet when hoisted; they may not be hoisted by choker slings.
- Avoid Oxygen-Acetylene rigs when possible and perform rough or demolition cutting with a Propane-Oxygen or Propylene-Oxygen system. Propane is more stable than Acetylene.

6.13 Underground Utility Locating

Procedures for locating buried utilities include:

- Contact the utility location service for public utilities.
- Use trained & competent in-house utility location personnel or subcontract a utility locating service to locate private utilities.
- Where available, obtain utility diagrams for the facility.
- Review locations of sanitary and storm sewers, electrical conduits, water supply lines, natural gas lines, and fuel tanks and lines for each work zone.
- Review proposed locations of intrusive work with facility personnel knowledgeable of locations of utilities. Check locations against information from utility mark-out service.
- Where necessary (e.g., uncertainty about utility locations) excavation or drilling of the upper depth interval should be performed manually.
- Monitor for signs of utilities during advancement of intrusive work (e.g. sudden change in advancement of auger or split spoon).
- Excavation permits are required at depths >5'.

6.14 Backing Field Vehicles

The following precautions shall be implemented to prevent incidents during backing of field vehicles:

- Avoid backing whenever possible. If extensive backing is required, alarms that sense when an object is close by must be used.
- If backing is required, there MUST BE a spotter. If a spotter is not available, the driver MUST walk completely around the vehicle before backing up.
- When backing is likely to be a part of the activities, it must be discussed in the daily safety briefings.
- Learn your vehicle's blind spots.
- The speed limit at the facility is **15 mph** for all vehicles.

6.15 Poor Illumination

This work may be conducted at a project site in areas without permanent lighting. Work will be conducted during daylight areas whenever possible. If work must be conducted at dawn or dusk, adequate temporary illumination will be provided. Temporary illumination connected to temporary power must be provided inside buildings where existing light fixtures have been disconnected or will be removed. Care will be taken when working near lighting fixtures.

6.16 Powered Hand Tools

Only authorized trained workers will be allowed to use powered hand tools including, but not limited to: power saws, shears, drills, grinders, etc. and only after reviewing the AEI's safety procedures. All tools will be inspected by the operator prior to use and defective tools will be removed from service. Guards for moving parts are not to be removed.

Electric-power tools will be double insulated or grounded. All power tools plugged directly into a electrical system must be plugged into a ground fault circuit interrupter-protected supply (i.e. - an extension cord with a GFCI). Tools shall not be lifted or lowered by their electrical cords.

6.17 Misconduct and Substance Abuse

Horseplay is prohibited. Employee use of intoxicants strictly forbidden during working hours and on the premises, violators are subject to dismissal. All employees must have a current passing drug test before being allowed on site. The approval or disapproval of employee's site access will be communicated to the facility guard station to allow or deny access. Copies of drug test records will be maintained on site.

Prescription Drugs

Any worker using a prescription drug that may impair mental or motor function, shall notify their supervisor. For the safety of all workers, AEI may not permit the worker on the project premises until released as "fit for duty".

Drug Testing

AEI will perform pre-hire, post-accident, and reasonable suspicion testing as company policy, and per applicable state laws. Employees who drive commercial company vehicles will be randomly tested in accordance with DOT regulations. Random drug testing will be performed in accordance with customer or facility owner's requirements.

6.18 Heavy Equipment

The hazards of working around heavy equipment include electrocution, caught-in, compressed or crushing hazards, struck-by hazards. When an equipment operator must operate in tight quarters, the Supervisor should assign a person to assist in guiding the operator's movements. Operators must be alert and aware of others in the area at all times. Traffic safety vests **ARE REQUIRED** for personnel working near mobile heavy equipment, such as cranes, excavators, loaders, and trucks. Never walk directly in back of or to the side of, heavy equipment without the operator's acknowledgment. Personnel must at all times be aware of the location and operation of heavy equipment, and take precautions to avoid getting the way of its operation. Never assume that the equipment operator sees you; make eye contact and use hand signals to inform the operator of your intent, particularly if you intend to work near or approach the equipment.

Heavy equipment may only be operated by authorized and trained personnel. All operators of lifts are trained under the OSHA requirements of 29 CFR 1926.453. No other personnel are allowed to ride on heavy equipment unless it is specifically designed to accommodate passengers; and only in seats that are provided for personnel transportation equipped with seat belts.

If equipment becomes electrically energized, personnel shall be instructed not to touch any part of the equipment or attempt to touch any person who may be in contact with the electrical current. The Utility Company or appropriate part shall be contacted to have the line de-energized prior to approaching the equipment.

Below is a summary list of equipment expected to be onsite:

- Skid Steer loader
- Forklift
- Boom Lift
- Scissor Lift

6.19 Cranes

AEI does not expect to use a crane, however if AEI does use a local crane & rigging subcontractor. The subcontractor will be evaluated, approved, and hired to perform crane and lifting activities including critical lifts. The competent person for crane and rigging inspections; documentation for cranes; and periodic inspection records will be provided by the subcontractor before crane work begins.

Note: No crane personnel lifts are intended.

The "Lifting Process" utilizes a team approach to lifting. The team consists of riggers, a flagger/signalperson, and a crane/equipment operator. The roles of the team members are as follows:

Rigger(s): Responsible for the rigging configuration, appropriate rigging hardware and the attachment and securing of the rigging hardware to the load.

Flagger: Responsible for the safe transport of the load, clear transport path and communications with the crane/equipment operator.

Operator: Crane/Equipment Operates the crane/equipment and responsible for the safe handling of the load.

Rigging shall comply with all requirements of the Crane, Hoist, and Rigging Safety program. Only hardware and equipment purchased or fabricated in accordance with company policies shall be used for the rigging of a load. There shall be no field alterations to such equipment unless approved by a qualified engineer. If the uniqueness of the load requires special rigging, a qualified engineer shall be consulted prior to the lift.

Riggers shall ensure that all required inspections are current. All rigging hardware shall be inspected prior to, during, and after use by a qualified rigger. "After Use" is defined as performing an inspection of rigging hardware at job completion or prior to return to tool issue or storage location. If the rigging hardware/equipment fails the inspection criteria, the rigger shall remove the equipment from service.

Cranes must receive a pre-operational inspection prior to use.

6.19.1 Lift Pre-Planning and Evaluation

ALL lifts require lift planning. Planning a lift may be accomplished in as little as five minutes or as long as several days according to the complexity of the lift.

A "Critical Lift" is a non-routine lift requiring detailed planning and additional or unusual safety precautions. Critical Lifts include lifts which require the load to be lifted, swung, or placed out of the view of the operator; lifts made with more than one crane; lifts involving non-routine or technically difficult rigging arrangement; hoisting personnel with a crane or derrick; or any lift which the lift or crane operator believes should be considered critical. Critical lifts require additional planning between the crane operator, competent person, and AEI representatives.

"VERBAL DISCUSSION" means that the individuals performing the lift discuss roles and responsibilities of those involved in the lift and ensure that the rigging hardware is appropriate for the lift and no other technical assistance is required to safely perform the lift.

"DOCUMENT" means to use the Lift Plan Form and write down the lift plan in such a manner that the lift plan can be retained for future use. Include enough information in the lift plan that another qualified individual (i.e., rigger, crane operator) can pick up the lift plan and be able to perform the lift as previously performed. The minimum information needed includes but is not limited to:

- Identifying roles and responsibilities;
- Calculation of stress loads on rigging hardware;
- Attachment point locations and dimensions;
- Rigging hardware support locations and dimensions; and
- Enough information to show that the rigging hardware and lifting equipment used is sufficient to make the lift safely.

Additional information included in the Lift Plan is dependent upon the complexity of the lifting task. The lift plan documentation shall be kept on file and may be used for future lifts.

6.19.2 Performing the Lift

NOTE: **All workers are responsible for the safe performance of hoisting and rigging activities. All workers have the authority to stop work:**

- When in doubt;
- When unsafe work practices are observed;

- When uncertain if proper pre-job briefs are in place;
- When proper engineering controls are in place; or
- When an approved lift procedure is being violated.

Clearing the Load

A load shall not be lifted until all individuals are clear unless conditions have been previously identified and cannot be avoided. "Clear" means adequate distance to ensure individual safety in case the load drops, shifts or swings. Loose material or items such as pipe, poles, or stacks from which a load is made shall be secured to prevent shifting during the lift. Tag lines shall be used where needed to control the load unless the use of tag lines causes a more unsafe condition than not using them.

6.20 Confined Space Entry

A confined space means a space that:

- is large enough and so configured that a person can bodily enter and perform assigned work;
- has limited or restricted means for entry or exit (for example, tanks, pipelines, boilers, silos, storage bins, underground utility vaults, vats, ductwork, sewers, tunnels, pits, and crawlspaces); and
- is not designed for continuous occupancy by people.

Each space on site will be evaluated for its status on a case-by-case basis. All spaces will be treated as permit required confined spaces.

The hazards encountered and associated with entering and working in confined spaces are capable of causing bodily injury, illness, and death. Hazards can be inherent to the space or introduced into the space by the work being performed in the space, atmospheric hazards may exist they include: flammable atmospheres; toxic atmospheres; irritant (corrosive) atmospheres; and asphyxiating atmospheres. Other hazards include: electrical; mechanical (moving & rotating parts); thermal hazards; noise; fall hazards; falling objects; slippery surfaces; engulfment; and entrapment. Confined spaces may only be entered by workers who have received confined space training. All confined space entry must be performed according to AEI Confined Space program.

- All Confined spaces must have a permit completed to assess the hazards of the space. The completed permit must be posted by the space.
- Push air into the space with a blower or fan before entry and when people are working inside the space.
- Monitor the air continuously with a 4-gas meter, measuring Lower Explosive Limit (LEL), % Oxygen, Carbon Monoxide (CO), and any potential toxic chemicals.
- Each space requires an attendant posted outside the space to watch over the entrants.
- Workers inside of the space will wear a full body harness and there will be a rescue system available at the site.

6.21 Exposure to Public Vehicular Traffic

The following precautions must be taken when working around public traffic, and in or near an area where traffic controls have been established. It is expected this hazard will exist during fencing / storm-water controls installation.

- Exercise caution when exiting traveled way or parking along street, avoid sudden stops, use flashers, etc.
- Park in a manner that will allow for safe exit from the vehicle.
- If working alongside a roadway, park vehicle so that it can serve as a barrier.
- All workers adjacent to a public roadway must wear reflective / high-visibility safety vests.
- Remain aware of factors that influence traffic related hazards and required controls (e.g. sun glare, rain, wind, flooding, hills, curves, guardrails, etc.)
- Always have an escape route.
- Always pay attention to moving traffic - never assume drivers are looking out for you.
- Work as far from the roadway as possible to avoid confusing drivers.
- Work facing traffic as often as possible. If work must be performed facing away from traffic, a "buddy system" should be used where one worker faces traffic.
- Traffic control devices such as barricades or signs should: 1) convey a clear meaning, 2) command attention of drivers, and 3)give adequate time for proper traffic response.
- Either a barrier or shadow vehicle should be positioned a considerable distance ahead of the work area. The vehicle should be equipped with a flashing arrow sign and truck-mounted crash cushion. All vehicles within 40 feet of traffic should have an orange flashing hazard light atop the vehicle.
- Except on highways, flaggers should be used when 1)two-way traffic is reduced to using one common lane, 2) driver visibility is impaired or limited, 3) project vehicles enter or exit traffic in an unexpected manner, or 4)the use of a flagger enhances established traffic warning systems.

6.22 Equipment Maintenance

Only trained and authorized personnel shall perform equipment repairs and maintenance. To prevent getting caught, pinched or injured by machine parts, machines must be turned off and locked out during most maintenance. Only manufacturers approved replacement parts, fluids, etc. shall be used. AEI employees will add fluids as necessary but will not make any more involved or serious repairs than that. Minor repairs including fluid and belt changes, surface hard-facing, welding repairs, replacement of blades and teeth will be performed on site by competent and experienced AEI personnel. Major repairs including repair/rebuild of engine and transmission components may require a subcontracted mechanic. All subcontractors must follow the provision of this Health and Safety Plan along with all site rules.

6.23 Stairways and Ladders

Limit use of ladders, use a lift or scaffold whenever possible. Fall protection should be considered when working from extension, straight, or fixed ladders greater than six feet from lower levels and both hands are need to perform the work, or when reaching or working outside of the plane of ladder side rails.

Safety guidelines pertaining to stairways and ladders include the following:

- Existing ladders will be inspected prior to use. Portable ladders deemed unacceptable will be removed from service and disposed. Fixed ladders used for access to equipment or buildings deemed unacceptable will be barricaded with proper signage.

- Stairway or ladder is generally required when a break in elevation of 19 inches or greater exists.
- Personnel should avoid using both hands to carry objects while on stairways; if unavoidable, use extra precautions.
- AEI only allows Type I fiberglass ladders for use on jobsites. Metal and wooden ladders or ladders rated at less than 200 lbs capacity should never be purchased or brought onto the jobsite.
- Ladders must be inspected by a competent person for visible defects prior to each day's use. Defective ladders must be tagged and removed from service.
- Ladders must be used only for the purpose for which they were designed and shall not be loaded beyond their rated capacity.
- Only one person at a time shall climb on or work from an individual ladder.
- User must face the ladder while climbing; keep belt buckle between side rails.
- Ladders shall not be moved, shifted, or extended while in use.
- Use both hands to climb the ladder, use ropes to raise and lower equipment and materials.
- Straight and extension ladders must be secured (tied off) to prevent displacement.
- Ladders that may be displaced by work activities or traffic must be secured or barricaded.
- Portable ladders must extend at least 3 feet above the landing surface.
- Straight and extension ladders must be positioned so that the distance from the ladder base to the wall is one-fourth of the working length of the ladders.
- Stepladders are to be used in the fully opened and locked position.
- Users are not to stand on the top two steps of stepladder; nor to sit on top of or straddle a ladder.

6.24 Job Task / Hazard Table

High - Exposure likely more than 50% of the time Med - Exposure likely 10-50% of the time
Low - Exposure likely less than 10% of the time N/A – Exposure not anticipated

Job Task		Chem. Hzds.	Fire Hzds.	Lifting Hzds.	Mech'l Hzds.	Electrical Hzds.	Heat Stress	Slip/Trip /Fall	Noise	Cuts
1	Site mobilization	N/A	Low	Low	Low	N/A	Med	Low	Low	Low
2	Facility assessment, orientation, survey	N/A	Low	Low	Low	Low	Med	Med	Low	Low
3	Establish temporary facilities	N/A	Low	Low	Low	Low	Med	Med	Low	Med

4	Equipment relocation	Med	Low	High	High	High	Med	Med	Med	High
5	Asbestos abatement	High	Low	Med	Med	Med	Med	High	Med	High
6	PCB Remediation	High	Low	Med	Med	Med	Med	High	Med	High
7	Universal Waste Removal	High	Low	Med	Med	Med	Med	High	Med	High
8	Debris Removal	Low	High	Med	High	Med	Med	Low	High	Med
9	Demobilization	N/A	N/A	Med	Low	N/A	Med	Low	Low	Low

TASK MINIMUM PROTECTIVE CLOTHING/EQUIPMENT REQUIREMENTS	
1 - 5	Steel-toed boots, hardhat, safety glasses, work gloves, hearing protection as appropriate. High-visibility vests during dawn or dusk, or when working in areas with operating heavy equipment.
6	Steel-toed boots, hardhat, safety glasses, work gloves, hearing protection as appropriate. Wear full-body protective suits (Tyvek® or polypropylene) with attached hoods and boot covers. Air purifying respirator with P100 (HEPA) cartridge. High-visibility vests during dawn or dusk, or when working in areas with operating heavy equipment.
7	Steel-toed boots, hardhat, safety glasses, work gloves, hearing protection as appropriate. If a negative pressure enclosure is constructed prior to Universal Waste removal, wear full-body protective suits (Tyvek® or polypropylene) with attached hoods and boot covers, air purifying respirator with P100 (HEPA) or Organic vapor (OV)/P100 combination cartridge. High-visibility vests during dawn or dusk, or when working in areas with operating heavy equipment.
8 - 12	Steel-toed boots, hardhat, safety glasses, work gloves, hearing protection as appropriate. Wear high visibility vest when working around operating equipment. Respiratory protection to be worn during concrete cutting.

Activities to be performed that will likely result in exposure to airborne contaminants will be performed in appropriate PPE including respiratory protection until personal monitoring has been performed and an exposure analysis has been completed to verify the level of respiratory protection in use.

When performing line breaking or equipment cleaning, residual wash water or scale may contain small quantities of concentrated chemicals. The PPE requirements are included under Task 8, above. Prior to engaging in these activities, the PPE selection must be evaluated to select proper protective materials to verify protection against the concentrated chemicals likely to be encountered.

7.0 Sampling and Analysis

7.1 Air Monitoring Plan (Asbestos)

Personnel on site will be monitored for potential exposure to airborne asbestos fibers. Sampling will be conducted by attaching a 25 mm MCE filter inside a conductive cowl to the breathing zone of the worker. Personnel exposure monitoring for this project will be performed by trained personnel. All personnel exposure monitoring will be performed in accordance with the Sampling and Inspection Requirements – Asbestos SOP. All sampling pumps will be calibrated to a flow rate of 2.0 liters per minute and sampling will be performed for the duration of the shift. Samples will be retrieved representing workers performing different types of tasks, with a goal of sampling one (1) representative for every four (4) to six (6) workers. Personal samples taken for asbestos will be submitted to Optimum Analytical Labatory, Salem, NH.

Contaminant	Filter Type	Flow Rate	Sampling Time	Analytical Method
Asbestos	25 mm MCE	2.0 L/min	~8 hrs	NIOSH 7400

7.2 Air Monitoring Plan (Lead)

AEI may perform torch or saw cutting of metal structures with lead coatings. When heating lead coated structures or performing manual or mechanical demolition of painted structures, AEI will perform personal exposure monitoring on demolition personnel. The personal sampling pump will be calibrated at the beginning and end of the shift, and the results recorded on AEI's sampling form. Samples will be submitted to Optimum Analytical Labatory, Salem, NH.

Contaminant	Filter Type	Flow Rate	Sampling Time	Analytical Method
Lead	0.8 µm MCE	2.0 L/min	~8 hrs	NIOSH 7083

7.3 Air Monitoring Plan (PCB)

During the PCB work activities, AEI shall perform personal air monitoring. Such air monitoring shall consist of air samples collected by NIOSH method 5503, using sorbent tubes 226-39 and Swinnex cassettes with filter media placed in the breathing zone of workers.

Contaminant	Filter Type	Flow Rate	Sampling Time	Analytical Method
PCB	13mm	0.05-2.0 L/min	~8 hrs	NIOSH 5503

7.4 Air Monitoring Plan (Silica)

Personal air sampling for silica will be performed randomly during the demolition and concrete processing phases of the project. Previous silica monitoring performed at other large scale concrete and cement demolition and processing projects performed by AEI have demonstrated that water used as a dust control was effective at keeping airborne silica levels below the PEL. Samples for silica dusts will be collected and analyzed in accordance with the National Institute for Occupational Safety and Health (NIOSH) Method 7500 (X-Ray Powder Diffraction). Samples will be analyzed for the three forms of crystalline silica Quartz, Cristobalite, and Tridymite. All samples will be submitted to Galson Laboratories, a laboratory that is accredited by the American Industrial Hygiene Association (AIHA) in the Industrial Hygiene Laboratory Accreditation Program (IHLAP).

Analyte	Method	Pump Flow-Rate (Liters/Minute)	Media	Exposure Limit	Action Level
Quartz	NIOSH 7500	2.5[1]	Alum. Cyclone + 5 µm PVC pre-weighed filter	Calculated	N/A
Cristobalite	NIOSH 7500	2.5	Alum. Cyclone + 5 µm PVC pre-weighed filter	Calculated	N/A
Tridymite	NIOSH 7500	2.5	Alum. Cyclone + 5 µm PVC pre-weighed filter	Calculated	N/A

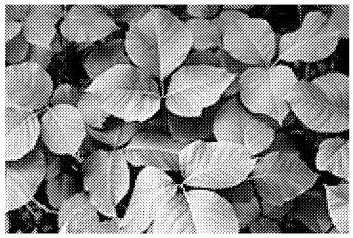
7.5 Negative Exposure Assessment

The Negative Exposure Assessment will be conducted through the calculation of 95% confidence intervals. The 95% confidence interval is employed by OSHA to determine compliance with permissible exposure limits. Confidence intervals are calculated based on the standard error of a measurement. Generally, the larger the number of measurements made, the smaller the standard error and narrower the resulting confidence intervals. Once the standard error is calculated, the confidence interval is determined by multiplying the standard error by a constant that reflects the level of significance desired, based on the normal distribution. The constant for 95 percent confidence intervals is 1.96. A confidence interval is a range around a measurement that conveys how precise the measurement is, and the expected stability of the measurement. If the 95% upper confidence limit is below the applicable PEL, AEI may modify the level of respiratory protection to minimize loss of peripheral vision, heat stress, and/or respiratory fatigue. For asbestos abatement projects, AEI will begin the abatement with a Powered Air Purifying Respirator (PAPR) until such time it has collected sufficient personal sampling data to perform a Negative Exposure Assessment. Copies of Negative Exposure Assessments will be maintained on site..

8.0 Biological Hazards and Controls

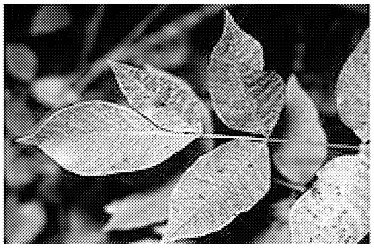
8.1 Poison Ivy and Poison Sumac

Poison ivy, poison oak, and poison sumac typically are found in brush or wooded areas. They are more commonly found in moist areas or along the edges of wooded areas. Become familiar with the identity of these plants.



Poison Ivy

Poison Oak



Poison Sumac

Wear protective clothing that covers exposed skin and clothes. Avoid contact with plants and the outside of protective clothing. If skin contacts a plant, was the area with soap and water immediately. If the reaction is severe seek medical attention.

9.0 Equipment and Supplies

9.1 Personal Protective Equipment

- Hardhats
- ANSI approved safety glasses + side shields
- PFAS (Personal Fall Arrest System)
- Face shields
- Ear plugs or muffs
- Steel-toed boots
- Work gloves (leather)
- Chemical protective gloves (Nitrile, PVC, or rubber)
- Powered Air Purifying Respirators (NIOSH approved)
- Full or half-face negative pressure respirators (NIOSH approved)
- OV respirator cartridge
- P100 respirator cartridge
- Tyvek® or polypropylene abatement suits (attached head and boot covers)
- Tyvek® or Saranex® chemical protective suits
- Burning greens for torch cutting

Personnel within the work area are to wear the specified PPE during site activities in accordance with this HASP.

Limitations of Protective Clothing

The protective equipment ensembles selected for this project are anticipated to provide protection against the types and concentrations of hazardous materials that may potentially be encountered during operations. However, no protective garment, glove or boot is resistant to all chemicals at any concentration; in fact, chemicals may continue to permeate or degrade a garment even after the source of the contamination is removed.

In order to obtain optimum usage from PPE, the following procedures are to be followed by all AEI personnel:

- When using disposable coveralls, don a clean, new garment after each rest break or at the beginning of each shift
- Inspect all clothing, gloves and boots both prior to and during use for:
  - Imperfect seams
  - Non-uniform coatings
  - Tears
  - Poorly functioning closures

- Inspect reusable garments, boots and gloves both prior to and during use for:
  - Visible signs of chemical permeation such as swelling, discoloration, stiffness or brittleness
  - Cracks or any signs of puncture or abrasion

Any reusable garments exhibiting any such characteristics will be discarded. Contaminated garments will be disposed in accordance with the regulatory waste handling and disposal requirements for those contaminants.

9.2 Health and Safety Equipment

- AEI Policies and Procedures (relevant to project)
- Barricade tape and barricades
- Respirator sanitizing equipment
- First Aid kits
- Bloodborne pathogens kit
- Drinking water
- Type ABC fire extinguishers
- Personal decontamination supplies
- Portable eyewash stations (15 minute rated)
- High visibility vests

9.3 Engineering Controls to be Used (as applicable)

- Barriers / barricades
- Negative pressure enclosures
- HEPA filtration

9.4 Instrumentation to be Used

- Personal sampling pumps
- Manometers
- 4-gas confined space monitors
- PID/FID

10.0 Scope of Work

10.1 Purpose and Scope of Work

The purpose of the project is to perform the asbestos abatement and PCB Remediation at the Estabrook Elementary School located at 117 Grove Street, Lexington, MA.

The AEI team is committed to protecting the health and safety of our workers, staff and others who may be at the site. We will provide thorough safety training to all our workers prior to and throughout the work. Prompt reporting of monitoring results will be given to workers to keep them apprised of site conditions.

The goal of AEI's Team work efforts will be characterized by the statement, "They Did It Right the First Time". The attention to detail, quality and environmental compliance goals will be demonstrated in all aspects of the job. Advance planning and staff demonstrating initiative will produce results that lead to Consigli Construction's satisfaction.

Before work on any major task (and for subtasks that have hazards different from the major tasks) begins, the AEI Team will complete a review of the task and identify potential hazards that may be encountered or are present in the area. Once the environmental and safety hazards are identified and addressed in the JHA, the entire for this task will participate in a JHA review before any work starts. AEI will insure that the entire work crew is familiar with the hazards and environmental concerns and that the task crew participates in development, training and understanding of the JHA.

10.1.1 Asbestos Abatement

Various items have been identified at the project to contain asbestos materials. Materials have been classified as Friable (Class I) and Non-Friable (Class II). A job safety plan will be prepared for each specific operation and include the following key components:

- General Conditions:
- Exposure assessments and monitoring I
- Medical Surveillance
- Respiratory Protection
- Regulated Work Area
- Hazard Communication
- Training
- Control Methods
- Workers and Equipment decontamination.

Friable Asbestos (Class I Work)

In addition to the general conditions above the following provisions apply to all friable asbestos material removal.

- Restricted work areas will be established using danger-posted access/egress locations through decontamination facilities.
- Seal all opening to the exterior of work area with 2 layers of 6-mil plastic sheeting.
- Impermeable drop cloths must be placed beneath the removal activity area.
- Objects in the regulated area will be covered and secured with plastic sheeting.
- Use of a negative pressure enclosure for work area or negative pressure glove bag removal systems.
- Adequate wetting to prevent asbestos fiber release.
- Removal for TSI will be full containment or negative pressure glove bag.

Non-Friable Asbestos (Class II Work)

In addition to the general conditions above, the following provisions apply to all non-friable asbestos removal work. These materials include transite, mastics, sealants, roofing and caulks.

- Regulated work areas will be established and demarcated using barricade and signage.
- Critical barriers will be placed over all openings for indoor removal activities.
- Materials shall be removed intact to the extent feasible
- Immediate Packaging.
- In some cases, such as transite and sink undercoating, the materials will be removed as a unit and intact.

PCB Remediation

Various items have been identified at the project to contain PCB's >50ppm and <50ppm. Building materials and locations of actual PCB Remediation has been identified within the Contract Documents and outlined within AEI's site specific remediation plan. In general, a job safety plan will be prepared for each specific operation and include the following key components:

- General Conditions:
- Exposure assessments and monitoring
- Medical Surveillance
- Respiratory Protection
- Regulated Work Area
- Hazard Communication
- Training
- Control Methods

- Workers and Equipment decontamination.

In addition to the general conditions above the following provisions apply to interior PCB remediation.

- Restricted work areas will be established using danger-posted access/egress locations through decontamination facilities.
- Seal all opening to the exterior of work area with 6-mil plastic sheeting.
- Use of a negative pressure enclosure for each work area, as applicable.
- Adequate wetting to reduce dust and emissions.

11.0 Responsibilities

AEI will strictly adhere to the provisions of this health and safety plan, along with the applicable regulations issued by governmental entities. AEI will coordinate safety activities as needed with DCAM representatives.

11.1 Health and Safety Manager

The Health and Safety Manager for the project will be Tom McQueen. Tom will be available on a as needed basis and is responsible for overseeing the Site Safety Officer, Project Manager and Site Super and verifying that the project is conducted in a safe manner including the following obligations:

- Verify the SSHASP is current and amended when project activities or conditions change.
- Verify that site personnel and subcontractors read this SSHASP and sign the acknowledgement that they understand.
- Manage the site and interface with third parties in a manner consistent with our contract/subcontractor agreements and the applicable standard of reasonable care.
- Ensure that programs are effectively functioning to prevent and control hazards on the project.
- Verify that all employees working in the field have the appropriate level of HS&E training, medical surveillance, and drug and alcohol testing for their job duties including required specialty training.
- Maintain active and visible involvement using open communication with employees regarding safety issues on the project.
- Verify that safety meetings are conducted and document in the project file as needed throughout the course of the project.
- Post required information on-site, including Occupational Safety and Health Administration (OSHA) job-site posters.
- Maintain HS&E records and documentation.
- Verify that all forms, permits, and hazard assessments are being used as outlined in this plan.
- Verify appropriate PPE use, availability, and training.

11.2 Project Manager

The Project Manager for the project will be Charlie Hughes. Charlie will be responsible for ensuring that the necessary personnel are available for the contracted responsibilities for this project, and that the reporting, scheduling, and budgetary obligations for the project are met. The project manager is ultimately responsible for ensuring that all project activities are completed in accordance with requirements set forth in this plan, including the following obligations:

- Ensure that the overall HS&E goals are fully and continuously implemented.
- Promote a safety culture with onsite personnel and set the example for safe behavior.

11.3 Superintendents

The Superintendent is responsible for the project's safety program and procedures and the assurance that they are followed. Each Project Superintendent in conjunction with the SHSO will have the overall responsibility for field implementation of the HASP. This includes communicating site requirements to all onsite project personnel.

To achieve these objectives the Site Superintendent must provide the following:

- Consider the safety factor in planning all job site operations.
- Conduct site safety orientation training for all employees new to the site, including visitors and subcontractors.
- Ensure orientation training is conducted for each new employee arriving at the project including site visitors explaining AEI safety policies and hazards specific to that person's work or visit. Communicate team approach to safety.
- Ensure that project site is adequately supplied with general personal protective equipment (PPE) such as hard hats, safety glasses, vests, fall protection equipment and hearing protection. Need to ensure that any specialty equipment is onsite well ahead of time needed.
- Ensure that hazard analyses are reviewed and used by work crews before engaging in site activities.
- Ensure that housekeeping for all areas of the site is acceptable.
- Ensure that adequate sanitation facilities and potable drinking water is provided for employees.
- Correct any unsafe acts or conditions immediately.
- Ensure that foremen and other staff are adequately trained to perform work safely.
- Ensure that incident reports and investigations are completed and submitted in a timely fashion.

11.4 Site Employees & Subcontractors

All personnel are assigned responsibility for safe and healthy operations. This concept is the foundation for involving all employees in identifying hazards and providing solutions. For any operation, individuals have full authority to stop work and initiate immediate corrective action or control. In addition, each worker has a right and responsibility to report unsafe conditions/practices. Each employee is responsible for the following:

- Perform work in a safe manner without injury, illness, or property damage.
- Perform work in accordance with company policies, and report near misses, injuries, illnesses, and unsafe conditions.
- Report all hazardous conditions and/or hazardous activities immediately to a supervisor for corrective action.
- Intervene when an unsafe behavior and/or condition is observed.
- Complete a Site Safety Orientation prior to being authorized to enter the project work areas.

12.0 Respirators

Engineering controls and safe work practices (e.g. elimination of the source of contamination, ventilation equipment, limiting exposure time, etc) must always be the primary control for air contaminants. Respirators will be used if engineering or work practice controls are not feasible for controlling airborne exposures below acceptable concentrations and as an interim control measure while engineering or work practice controls are implemented. At the project site, the SHSO will serve as the respiratory protection program administrator. The responsibilities of the program administrator are included in the Respiratory Protection Program.

Once the need for respirators has been established, the respirators will be selected on the basis of the hazards to which the worker is exposed. Only NIOSH-approved respirators will be issued. Selection criteria established in 29 CFR 1926.103 has been used by the HASP Preparer in determining respirator requirements for this project.

CAUTION: Full-face piece or half-face piece air-purifying respirators are not to be used where there is an oxygen deficiency. Only air-supplied respirators with an emergency escape cylinder or self-contained breathing apparatus will be worn when an oxygen deficiency exists.

CAUTION: A respirator does not protect against excessive heat or against hazardous substance that can attack the body through the skin.

12.1 Medical Screening

AEI project employees are enrolled in the Medical Surveillance Program and are medically evaluated in compliance with the requirements of 29 CFR 1926.103. Employees not physically or psychologically capable of wearing respirators are not to be assigned to this project.

The medical status of each employee is reviewed annually and as may be deemed necessary by the examining physician if the physical status of the employee changes.

12.2 Fit Testing

A person wearing a respirator must be clean-shaven in the area of the face piece seal. Long hair, sideburns, and skullcaps that extend under the seal are not allowed. Glasses with temple pieces extending under the seal are not allowed for full-face respirators. Persons with facial conditions that prevent a proper seal are not allowed to wear a respirator until the condition is corrected. Facial conditions that may cause a seal problem include missing dentures, scars, severe acne, etc. Contact lenses can be used with air purifying, but not supplied air respirators.

No individual will enter an area where the use of respiratory protective equipment is required unless the person has been fit tested within the last year. Qualitative fit testing will be performed in accordance with accepted fit test procedures defined in the Respiratory Protection Program a copy of which is maintained at the site.

Records of fit testing will be maintained on site or by the local AEI office and/or corporate medical surveillance program manager.

Respirator wearers will perform a user seal check each time the respirator is put on. For air purifying respirators, the positive user seal check is performed by first removing the exhalation valve cover, then placing the palm over the respirator exhalation valve and exhaling gently. The respirator mask should puff out without noticeable leakage. The negative user seal check is performed by placing the palms over both of the respirator cartridges, inhaling gently, and holding the breath for 10 seconds. The respirator mask should remain collapsed on the face without noticeable leakage.

12.3 Respirator Use Instructions

Only those employees who have been properly trained and qualified on the specific type of respirator to be worn may use respirators. No individual will enter an area where the use of respiratory protective equipment is required unless the person has been trained.

All employees whose job assignment requires the use of respirators are given training in accordance with 29 CFR 1926.103.

Hands-on training on inspecting and donning a respirator, including user seal checks, was also provided at the time of fit testing. Retraining is performed annually on each type of respirator worn by the individual. In addition, site-specific respirator training is provided during Site Safety Briefings conducted by the HSM. Training records are kept in the employee's training file.

Particulate respirator cartridges should be changed out when the wearer has difficulty breathing through the cartridges.

The fit of a chemical gas or vapor respirator should be rechecked and the cartridges changed if the wearer detects chemical odor or feels chemical irritation on the skin, both indicators of leakage or cartridge breakthrough. Where available, an ESLI (end-of-service-life indicator) will be used on chemical respirator cartridges. Cartridges will be changed as soon as the ESLI indicates that the cartridge is saturated and no longer effective in absorbing airborne chemicals.

12.4 Respirator Inspection

The user will inspect respirators before and after each day's use.

Inspection procedure, air-purifying respirators (full-face piece and half-face piece cartridge respirators):

Examine the face piece for:

- Excessive dirt
- Cracks, tears, holes, or distortion from improper storage
- Inflexibility
- Cracked or badly scratched lenses (full-face only)
- Incorrectly mounted eyeglass lenses or broken or missing mounting clips (full-face only)
- Cracked or broken air purifying element holder, badly worn threads, or missing gaskets

Examine the head straps or head harness for:

- Breaks or cracks
- Broken or malfunctioning buckles
- Excessively worn serration on the head straps, which may permit slippage

Examine the inhalation valves (2) and exhalation valve for:

- Foreign material (e.g. hairs, particles, etc.)
- Improper insertion of the valve body in the face piece
- Cracks, tears, or chips in the valve body, particularly in the sealing surface
- Missing or defective exhalation valve covers

Examine the air-purifying cartridge for:

- Missing or worn cartridge holder gasket
- Incorrect cartridge type, installation, loose connections, or cross threading in the holder
- Cracks or dents in the outside case or threads of filter or cartridge/canister

12.5 Cleaning of Respirators

Respirators assigned and worn by one individual must be dismantled and thoroughly cleaned and disinfected after each day's use. Visitors or multi-assigned respirators must be cleaned and disinfected after each use. A disinfectant spray or wipe is approved as a disinfectant between uses during the day but not for cleaning and sanitizing after each day's use. Care must be taken to prevent damage from rough handling during the cleaning procedure. After cleaning, respirators must be reassembled.

Respirator Cleaning Procedure

Washing: Disassemble and wash with a mild liquid detergent in warm water (not to exceed 110°F). A stiff bristle (not wire) brush may be used.

Rinsing: Rinse in clean water (110°F maximum) to remove all traces of detergent. This is very important to prevent dermatitis.

Disinfecting: Thoroughly rinse or immerse in a sanitizer provided by the manufacturer. Alternatively, a weak chlorine bleach solution (1 milliliter liquid bleach/liter of water) may be used.

Final Rinsing: Rinse thoroughly in clean water (110°F maximum) to remove all traces of disinfectant. This is very important to prevent dermatitis.

Drying: Drain and dry with clean soft clothes or paper towels.

12.6 Maintenance of Respirators

Routine respirator maintenance such as replacing missing valves, gaskets, nose cups etc., must only be performed by trained respirator users or a respirator manufacturer's representative. Only approved replacement parts must be used. Substitution of parts from a different brand or type of respirator is generally not possible, invalidates the technical approval of the respirator, and is not permitted. Any respirator suspected of being defective must be removed from service and replaced.

12.7 Storage of Respirators

When not in use, respirators must be stored to protect them from dust, sunlight, heat, extreme cold, excessive moisture, damaging chemicals, and physical damage. Respirators must be stored in re-sealable (e.g. Ziplock® or twist-tie) reusable plastic bags between shifts. The respirator storage environment must be clean, dry, and away from direct sunlight. Onsite cabinets or cases are suggested. Storing bagged respirators in vehicles is discouraged due to the potential for damage from other material or equipment.

13.0 Decontamination Procedures

13.1 Personnel Decontamination

Whenever respirators and accompanying PPE are used, the following steps will be followed whenever personnel leave the work area. During other activities where lesser PPE is worn, personnel will remove soiled items and wash their hands and face before eating, drinking, etc.

1. Remove all equipment, sample pumps, etc. that require cleaning to the cleaning area.
2. Remove boot covers (if used).
3. Remove outer disposable coverall and place in bag for disposal.
4. Remove gloves.
5. Remove hardhat and eye protection.
6. Proceed to wash facilities and wash hands and face.

Each worker will be responsible for cleaning, sanitizing and storing their own respirator in accordance with manufacturer's guidance (i.e., washing in warm water and detergent or sanitizing solution, air drying, and storing in a plastic storage bag.)

13.1.1 Asbestos Decontamination

A combination of attached three stage decontamination chambers and remote decontamination trailers will be used for decontamination serving exterior work and for Class I jobs involving less than 25 linear or 10 square feet of TSI. For all Class I asbestos jobs involving greater than 25 linear or 10 square feet of TSI or surfacing ACM and PACM a 3 stage decon will be erected adjacent and connected to the regulated area. Prior to leaving a regulated area employees shall remove asbestos contamination from their worksuits in the equipment room using a HEPA vacuum before proceeding to the shower that is adjacent to the work area or remove the worksuits in the equipment room and don clean worksuits and proceed a remote shower in accordance with OSHA 1926.1101(j)(1).

All water will be collected, pumped, and filtered down to 5 microns and discharged to existing sanitary sewer. AEI may use portable decon trailers around the facility.

13.1.2 PCB Decontamination

Workers will use the two stage decontamination facility located at the entrance to the regulated work area to remove contaminated PPE and to wash any exposed skin areas prior to leaving the regulated areas. All packaged PCB waste and non-porous equipment in the work area will be decontaminated to the level of no visible dust or debris in the two stage waste load out facility prior to leaving the work area.

All moveable equipment, tools and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2) by swabbing the potentially contaminated surfaces with a PCB soluble solvent and wipes prior to leaving the work area. The wipes shall be disposed of PCB Remediation Waste. In accordance with the project specifications, rags and a water/detergent mixture will be used to perform routine decontamination during work inside the regulated area.

Following the demolition work and the decontamination and load out of all packaged waste from the work area, the work area itself will be decontaminated to the level of no visible debris, as determined by visual inspection from American and the Owner's consultant.

13.1.3 Equipment Decontamination

All equipment must first pass a visual standard for cleanliness from contamination. American will wash down the equipment during the remediation process. Water used to clean and decontaminate equipment will be captured and placed into bags or drums and disposed of properly.

13.2 Sanitation / Wash / Change Facilities

Sanitation facilities are provided in the form of portalets and handwashing stations located around the site. As needed, facilities will be moved around the site to provide coverage to work areas. No pre-existing restrooms in process areas are in service, whether marked or unmarked.

Potable water will be made available at the site from commercially available bottled water. Sources of non-potable water shall be clearly labeled as such.

14.0 Safe Work Practices

14.1 General

1. Eating, drinking, chewing gum or tobacco, applying cosmetics and smoking are prohibited in any potentially contaminated areas or where the possibility for the transfer of contamination exists. Smoking is only allowed in designed areas.
2. Personnel will wash their hands and face thoroughly with soap and water prior to eating, drinking or smoking. Soap and water will be provided in the portable handwashing stations, operating bathrooms in the administrative and break trailers, and at asbestos decontamination chambers.
3. Avoid contact with potentially contaminated substances. Do not walk through puddles, pools, etc. Avoid, whenever possible, kneeling, leaning or sitting on contaminated surfaces. Do not place monitoring equipment on potentially contaminated surfaces.
4. Only equipment required to complete work tasks should be permitted within the work zone.
5. Containers, such as drums, will be moved only with the proper equipment and will be secured to prevent dropping or loss of control during transport.
6. Instruments, such as sampling pumps and 4-gas meters, should be handled with care to minimize the potential for damage.
7. Contaminated protective equipment, such as respirators, hoses, boots, and disposable protective clothing, will not be removed from the work area/exclusion zone or decontamination area until it has been cleaned, or properly packaged.
8. Prevent, to the extent possible, spills. In the event that a spill occurs, contain liquid if possible.
9. Field crewmembers shall be oriented as to the physical characteristics of the site operations including:
    - Accessibility to equipment;
    - Areas of known or suspected contamination;
    - Site access; and
    - Emergency equipment such as fire extinguishers and rescue equipment.
10. All personal protective equipment will be used as specified and required.
11. The buddy system will be used at all times when performing high hazard tasks or when working in remote areas.
12. Personnel are to immediately notify the SHSO or Superintendent if any indications of potential hazards or unusual conditions are observed.

14.2 Duration of Work Tasks

The duration of work tasks in which personnel use PPE ensembles that include chemical protective clothing (including uncoated Tyvek®) will be established by the SHSO. Variables to be considered include ambient temperature and other weather conditions, the capacity of individual personnel to work in the required level of PPE in heat and cold, and the limitations of specific PPE ensembles. The recommended rest breaks are as follows:

- Fifteen minutes between shift startup and lunch
- Lunch break (30-60 minutes)
- Fifteen minutes between lunch and shift end

Rest breaks are to be taken in the support zone or other clean area after personnel have completed the decontamination process, including soap and water wash of hands and face. Additional short breaks in activity may be taken in the work area if needed to rest after any prolonged strenuous tasks.

15.0 Training and Medical Surveillance

AEI site personnel will have met the training requirements for their assigned tasks including:

- Hazard communication title 29 CFR 1926.59
- Respirators title 29 CFR 1926.103
- Asbestos title 29 CFR 1926.1101
- Lead in Construction title 29 CFR 1926.62
- Lock out Tag out procedures
- Specific tools and equipment to be used

All site personnel shall have a current medical evaluation and training that meets the requirements of 1926.103 in any areas requiring respirators. The local AEI offices maintain current copies of training certificates and statements of medical program participation for all AEI personnel.

Appropriate training is provided to ensure the individuals involved in hazardous waste generations and disposal understand regulatory requirements and methods to minimize hazards and risks associated with the management of hazardous waste. This training may include instruction USEPA, MA, OSHA and USDOT requirements. AEI conducts or makes available training programs to comply with the appropriate aspects of the following regulations.

- USEPA's Resource Conservation and Recovery Act (RCRA)
- United States Department of Transportation (USDOT) Hazardous Material Transportation Act (HMTA) HM 181/126 F.
- OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) 29 CFR 1910.120.

Prior to the start of operations at the site, the SHSO will conduct an orientation, which will include all personnel involved in site operations. At this meeting, the SHSO will discuss:

- Contents of this HASP
- Types of hazards at the site and means for minimizing exposure to them
- The type of monitoring that will be performed
- Personal protective equipment that will be used
- Site-specific respiratory protection requirements
- Decontamination protocol
- Site control measures, including safe operating practices and communication
- Location and use of emergency equipment
- Evacuation signals and procedures

All site personnel will receive an orientation of this HASP and will sign a copy of the Safety Plan Compliance Agreement.

16.0 Appendices

Appendix A. Health and Safety Plan Acknowledgement

HASP ACKNOWLEDGEMENT

Project Name: **Asbestos Abatement and PCB Remediation, Estabrook Elementary School**	Site Name: Estabrook Elementary School
Project #: M13-	Site Location: 117 Grove Street, Lexington, MA

I acknowledge that I understand the requirements of this HASP, and agree to abide by the procedures and limitations specified herein. I also acknowledge that I have been given an opportunity to have my questions regarding the HASP and its requirements answered prior to performing field activities. Health and safety training and medical surveillance requirements applicable to my field activities at this site are current and will not expire during onsite activities.

Name (print)	Signature	Date

I acknowledge that I have verified that the employees listed above have fulfilled the health and safety training requirements for this site. I have also verified that the above employees have fulfilled the medical surveillance requirements and any client requirements to participate in a substance abuse screening program for this site and do not have any medical restrictions that would prohibit them from performing tasks that they are assigned to at this site. I also hereby attest that the personal protective equipment described in this HASP was selected based on an appropriate assessment of the hazards of the site and work covered by this HASP.

Authorized AEI Site Management Representative Signature: Title:	Date:

SUBMITTAL 1.10.F

Worker Certification

In trying to protect the environment and help reduce paper waste, AEI has included a list of Supervisors scheduled to be at the site for the duration of the project and their specific paperwork. American Environmental has included a spreadsheet which outlines their License Information, Training, Date of Medical and Date of Fit Test currently on file. All worker documentation is current and American will have a copy of all documents on-site for the duration of the project. The Owner's Representative will have access to review the worker documents on-site at any time. AEI worker information will be supplied as necessary prior to the start of work , as the workers may change for this specific project due to the length of time between this submittal and start of the project.

SHAWMUT DESIGN & CONSTRUCTION

Job Name: Lexington Estabrook Elementary

Job #: 120255 Date: **1.16.2014**

SDC has reviewed this submittal for conformance with the contract documents and conditions of the contract.

Reviewed By: **K. Woodbury**

SHOP DWG:	☐	PRODUCT DATA:	☐
SAMPLE:	☐	REVIEW ONLY:	☒

SUBMITTAL #: **SP299 - 003-020720-2**

American Environmental, Inc.

	MA License Info		Training Cert	Medical	Fit Test
Name	**License No.**	**Expires**	**Expires**	**Date of Exam**	**Date of Test**
Julio Bermejo	AS072692	7/10/2014	1/26/2014	3/19/2013	1/7/2013
Jose Abarca	AW007772	5/21/2014	2/16/2014	3/15/2013	2/16/2013
Claudio Bermejo	AS001024	3/19/2014	4/27/2014	4/29/2013	10/24/2013
Anthony Casiano	AW935847	3/19/2014	3/14/2014	3/18/2013	3/19/2013
Manuel Casiano	AS002143	5/28/2014	5/20/2014	5/8/2013	5/6/2013
Miguel Chaco	AS002143	5/28/2014	9/21/2014	5/8/2013	5/6/2013
Dositeo Garrido	AW006649	6/18/2014	6/1/2014	6/17/2013	6/14/2013
Alan Hardy	AS005044	3/19/2014	2/27/2014	1/25/2013	1/25/2013
Pablo Martinez	AS901144	7/9/2014	3/22/2014	3/28/2013	7/2/2013
Gilberto Robles	AS001139	3/19/2014	8/10/2014	9/21/2013	9/21/2013
Julio Venture	AS001178	5/7/2014	2/27/2014	2/6/2013	5/20/2013

STATEMENT OF TRAINING

This certifies that

Julio Bermejo

has successfully completed the

8 Hour Health & Safety Refresher Training for Hazardous Waste Site Activities & Global Harmonized Recognition Per 29 CFR 1910.120 (HAZWOPER)

conducted by
Cardno ATC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

David Morath
Principal Instructor

Gregory J. Morsch
Regional Manager

January 4, 2013
Date of Course

8HMR-15707
Certificate Number

January 4, 2014
Expiration Date

January 4, 2013
Examination Date

LAWRENCE TRAINING SCHOOL, INC.

This is to Certify

Jose D. Abarca

Has successfully completed the 40 hour course

Hazardous Waste Operations and Emergency Response

Pursuant to the requirements identified in Title 29 CFR 1910.120.

HMR0612-10-JA4768

Certificate Number

JUN 02, 03, 09 & 10, 2012

Date(s) of Training

JUN 10, 2012

Date of Examination

JUN 10, 2013

Expiration Date

Mario Alcántara

President/Director of Training

50 Pleasant Street Lawrence, MA 01841 | 978-689-7370 | www.lawrencetrainingschool.com

This is to certify that

Jose Abarca

has attended the 8-hour course

Spanish Hazardous Waste Operations Refresher

pursuant to OSHA 29 CFR Part 1910.120

Course Location
Northern Essex Community College
45 Franklin Street Lawrence, MA 01841

June 8, 2013
Course Dates

13-7900-982-258420
Certificate Number

June 08, 2013
Examination Date

June 08, 2014
Expiration Date

Training Director

16 Upton Drive, Wilmington, MA 01887 Telephone 978.658.5272 www.ieicourses.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION

HAZARD WASTE WORKER
REFRESHER TRAINING COURSE

CLAUDIO M BERMEJO	
Certificate Number: 504541331012	
S.S.#:	XXX-XX-5045
Completed Initial Course:	
Refresher Completed:	10/23/2012
Refresher Date: 10/23/2013	

COMPLIES WITH OSHA 29 CFR 1910.120.

CERTIFICATE OF ACHIEVEMENT

This certifies that

Claudio Bermejo

has successfully attended an

8-Hour Initial Supervisor Hazardous Waste Operations and Emergency Response (HazWoper), 29 CFR 1910.120 and 29 CFR 1926.65

Training held for American Environmental, Holyoke, MA

conducted by
Cardno ATC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Principal Instructor

Regional Manager

July 2-3, 2013
Date of Course

HWSS-003
Certificate Number

July 3, 2014
Expiration Date

Not Applicable
Examination Date

40 - HOUR HAZARD WASTE TRAINING COURSE

MANUEL CASIANO	
Certificate Number: 301141510913	
S.S.#:	XXX-XX-3011
Date Completed:	10/4/2013
Refresher Date: 10/4/2014	

THIS CERTIFICATE INDICATES SUCCESSFUL COMPLETION OF TRAINING AS REQUIRED BY OSHA 29 CFR 1910.120.

LAWRENCE TRAINING SCHOOL, INC.

This is to Certify

Dositeo R. Garrido

Has successfully completed the 40 hour course

Hazardous Waste Operations and Emergency Response

Pursuant to the requirements identified in Title 29 CFR 1910.120.

HMR0612-10-DG4564

Certificate Number

JUN 02, 03, 09 & 10, 2012

Date(s) of Training

JUN 10, 2012

Date of Examination

JUN 10, 2013

Expiration Date

Mario Alcántara

President/Director of Training

50 Pleasant Street Lawrence, MA 01841 | 978-689-7370 | www.lawrencetrainingschool.com

This is to certify that

Dositeo R Garrido

has attended the 8-hour course

Spanish Hazardous Waste Operations Refresher

pursuant to OSHA 29 CFR Part 1910.120

Course Location
Northern Essex Community College
45 Franklin Street Lawrence, MA 01841

June 8, 2013
Course Dates

13-7900-982-254503
Certificate Number

June 08, 2013
Examination Date

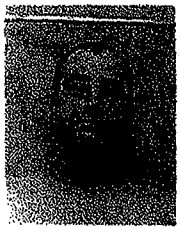
June 08, 2014
Expiration Date

Training Director

16 Upton Drive, Wilmington, MA 01887 Telephone 978.658.5272 www.ieetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION

40 HOUR HAZARDOUS WASTE WORKER



ALAN D HARDY
Certificate Number: 455800541510413
S.S.#: XXX-XX-4760
Date Completed: 4/5/2013
Refresher Date: 4/5/2014
Instructor: MICHAEL LEPORE

THIS CERTIFICATE INDICATES SUCCESSFUL COMPLETION OF TRAINING AS REQUIRED BY OSHA 29 CFR 1910.120.

CERTIFICATE OF ACHIEVEMENT

This certifies that

Alan Hardy
has successfully attended an

8-Hour Initial Supervisor Hazardous Waste Operations and Emergency Response (HazWoper), 29 CFR 1910.120 and 29 CFR 1926.65

Training held for American Environmental, Holyoke, MA

conducted by
Cardno ATC
73 William Franks Drive
West Springfield, MA 01089
(413) 781-0070

Principal Instructor

Regional Manager

July 2-3, 2013
Date of Course

HWSS-001
Certificate Number

July 3, 2014
Expiration Date

Not Applicable
Examination Date

LAWRENCE TRAINING SCHOOL, INC.

This is to Certify

Gilberto Robles

Has successfully completed the 40 hour course

Hazardous Waste Operations and Emergency Response

Pursuant to the requirements identified in Title 29 CFR 1910.120.

HMR0612-10-GR4284

Certificate Number

JUN 02, 03, 09 & 10, 2012

Date(s) of Training

JUN 10, 2012

Date of Examination

JUN 10, 2013

Expiration Date

Maria Alcántara

President/Director of Training

50 Pleasant Street Lawrence, MA 01841 | 978-689-7870 | www.lawrencetrainingschool.com

This is to certify that

Gilberto R Robles

has attended the 8-hour course

Spanish Hazardous Waste Operations Refresher

pursuant to OSHA 29 CFR Part 1910.120

Course Location
Northern Essex Community College
45 Franklin Street Lawrence, MA 01841

June 8, 2013
Course Dates

13-7900-982-254508
Certificate Number

June 08, 2013
Examination Date

June 08, 2014
Expiration Date

Training Director

INSTITUTE FOR ENVIRONMENTAL EDUCATION

SUBMITTAL 1.10.G

Certificate of Insurance

SHAWMUT DESIGN & CONSTRUCTION

Job Name: Lexington Estabrook Elementary

Job #: 120255 Date: **1.16.2014**

SDC has reviewed this submittal for conformance with the contract documents and conditions of the contract.

Reviewed By: **K. Woodbury**

SHOP DWG:	☐	PRODUCT DATA:	☐
SAMPLE:	☐	REVIEW ONLY:	☒

SUBMITTAL #: **SP299 - 004-020720-2**

PCB Submittal
Estabrook Elementary School, Lexington, MA

Client#: 37911 AMERI11

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 12/04/2013

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER McClure Insurance Agency, Inc. 103 Van Deene Avenue P. O. Box 339 West Springfield, MA 01090	CONTACT NAME: PHONE (A/C, No, Ext): 413 781-8711 FAX (A/C, No): 413 731-8548 E-MAIL ADDRESS:
INSURED American Environmental, Inc. 18-20 Canal Street Holyoke MA 01040	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Century Surety Company INSURER B : Arbella Protection Insurance Co INSURER C : INSURER D : INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY	X	X	CCP759191	03/25/2013	03/25/2014	EACH OCCURRENCE	$1,000,000
	X COMMERCIAL GENERAL LIABILITY			POLLUTION	LIABILITY		DAMAGE TO RENTED PREMISES (Ea occurrence)	$100,000
	CLAIMS-MADE X OCCUR						MED EXP (Any one person)	$10,000
							PERSONAL & ADV INJURY	$1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$2,000,000
	X POLICY PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$2,000,000
								$
B	AUTOMOBILE LIABILITY			86879400004	04/18/2013	04/18/2014	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
	ANY AUTO						BODILY INJURY (Per person)	$
	X ALL OWNED AUTOS X SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB X OCCUR	X	X	CCP759192	03/25/2013	03/25/2014	EACH OCCURRENCE	$5,000,000
	EXCESS LIAB CLAIMS-MADE			EXCESS	LIABILITY		AGGREGATE	$5,000,000
	DED X RETENTION $10000							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY Y/N		X	WC0725152	03/29/2013	03/29/2014	WC STATU-TORY LIMITS OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? N	N/A					E.L. EACH ACCIDENT	$1,000,000
	(Mandatory in NH)						E.L. DISEASE - EA EMPLOYEE	$1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - POLICY LIMIT	$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

RE: MSBA - Estabrook Elementary School Lexington; Project #120255, 117 Grove St., Lexington MA 02420
The following are additional insured on a Primary and Non-Contributory basis: Shawmut Design and Construction, Town of Lexington, DiNisco Design Partnership, Massachusetts School Building Authority, Collaborative Partners and Costello Dismantling Co., Inc.

CERTIFICATE HOLDER

Costello Dismantling Co., Inc.
45 Kings Highway
West Wareham, MA 02576

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

William H. McClure

CBM

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – COMPLETED OPERATIONS PRIMARY AND NON-CONTRIBUTORY

This endorsement modifies insurance provided under the following:

ENVIRONMENTAL CONTRACTORS & CONSULTANTS COMMERCIAL GENERAL LIABILITY, CONTRACTOR'S POLLUTION LIABILITY AND CONSULTANT'S PROFESSIONAL LIABILITY POLICY

SCHEDULE

Designated Additional Insured(s):	**Designated Project or Premises:**
The coverage applies on a blanket basis as required by written contract.	As required by written contract.

In consideration of the premium paid, it is hereby agreed that:

A. **Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage", "personal and advertising injury" or "environmental damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard"; and

B. The insurance provided for the benefit of the above designated Additional Insured(s) shall be primary and non-contributory, but only with respect to liability for "bodily injury", "property damage", "personal and advertising injury" or "environmental damage" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

performed for the above designated Additional Insured(s) at the above designated project or premises and included in the "products-completed operations hazard".

All other terms and conditions of this policy remain unchanged.

8. **Transfer Of Rights Of Recovery Against Others To Us**

   a. If the insured has rights to recover all or part of any payment we have made under this Policy, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

   b. When required by a written contract, we waive any right of recovery we may have against the person or organization party to such written contract because of payments we make for injury or damage arising out of the insured's ongoing operations or "your work" done under such written contract with that person or organization and included in the "products - completed operations hazard".

9. **Selection Of Counsel**

   In the event the insured is entitled by law to select independent counsel to defend a "suit" at our expense, the attorneys' fees and all other litigation expenses we must pay to that counsel are limited to the rates and payment schedules we actually pay to counsel we retain in the ordinary course of business in the defense of similar "claims" or "suits" in that jurisdiction.

   We may exercise the right to require that such counsel have certain minimum qualifications with respect to their competency including experience in defending "claims" or "suits" similar to the one pending against the Insured and to require such counsel to have errors and omissions insurance coverage. As respects such counsel, the insured agrees that counsel will timely respond to our requests for information regarding the "claim" or "suit". Furthermore the insured may at any time freely and fully waive these rights to select independent counsel as evidenced by a signed waiver.

10. **Calculation of Premium**

    The premium shown in the Declarations was computed based on rates in effect at the time the Policy was issued. On each renewal, continuation or anniversary of the Effective Date of this Policy, we will compute the premium in accordance with the rates and rules then in effect.

SECTION V - EXTENDED REPORTING PERIOD – COVERAGE E CONSULTANT'S PROFESSIONAL LIABILITY

1. We will provide one or more Extended Reporting Periods, as described below, if:

   a. The coverage provided under Coverage **E** is cancelled or not renewed for any reason except for non-payment of premium material misstatements on an insurance application or failure to cooperate; or

   b. We renew or replace the coverage provided under Coverage **E** with insurance that:

      (1) Has a Retroactive Date later than the date shown in the Declarations as applicable to Coverage **E**; or

      (2) Does not apply to Coverage **E** on a "claims"-made and reported basis.

2. Extended Reporting Periods do not extend the "policy period" or change the scope of coverage provided. They apply only to "claims" arising out of "professional services" that occur before the end of the "policy period" but not before the Retroactive Date, if any, shown in the Declarations. Once in effect, Extended Reporting Periods may not be cancelled.

3. A Basic Extended Reporting Period is automatically provided without additional charge. This period starts with the end of the "policy period" and lasts for sixty (60) days. The Basic Extended Reporting Period does not apply to "claims" that are covered under any subsequent insurance the insured purchases, or that would be covered, but for exhaustion of the amount of insurance applicable to such "claims".

4. One of two possible Supplemental Extended Reporting Periods is available. One or the other, but never both, must be selected as described below prior to the expiration of this Policy.

   a. A 60-Month Supplemental Extended Reporting Period is available, but can be obtained only if an endorsement is issued by us and the insured pays an extra charge equal to 200% of this Policy's premium. The Insured must give us a written request for the endorsement within sixty (60) days of the expiration of this Policy. The 60-Month Supplemental Extended Reporting Period will not go into effect unless the insured pays the additional premium, in full, at the time the endorsement is requested. This endorsement shall set forth the terms, not inconsistent with this section, applicable to the 60-Month Supplemental Extended Reporting Period. Insurance afforded for "claims" first received during the 60-Month Supplemental Extended Reporting Period is excess over any other valid and collectible insurance available under policies in force after the 60-Month Supplemental Extended Reporting Period starts. This 60-Month Supplemental Extended Reporting Period starts when the Basic Extended Reporting Period, set forth in **C.** above, ends; or

   b. A 10 -Year Supplemental Extended Reporting Period is available, but can be obtained only if an endorsement is issued by us and the insured pays an extra charge equal to no less than 450% of this Policy's premium. The Insured must give us a written request for the endorsement within sixty (60) days of the expiration of this Policy and submit to underwriting. The 10-Year

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

WC 00 03 13
(Ed. 4-84)

AMERICAN ENVIRONMENTAL, INC.
18 CANAL ST., HOLYOKE MA 01040
POLICY PERIOD: 03/25/2013-03/25/2014
POLICY #: WC0725152

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

BLANKET

MA

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective 06/12/2012 Policy No. WC 0725152 Endorsement No. 001

Insured AMERICAN ENVIRONMENTAL CORP Premium $

Insurance Company STAR INSURANCE COMPANY Countersigned by William H. McGee

Hart Forms & Services
Reorder No. 14-4888